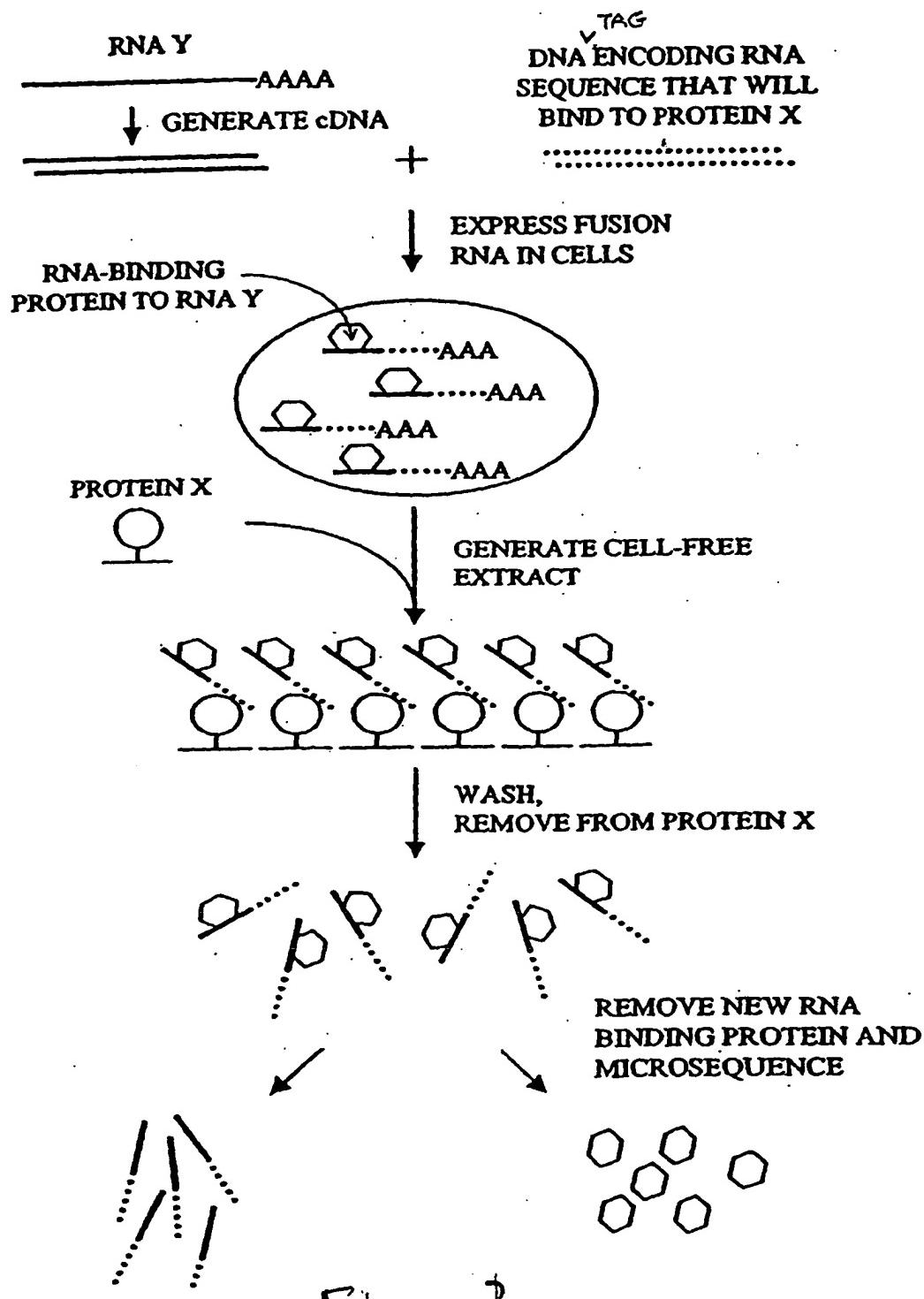


Biotinylated mRNA ——————●
Streptavidin-agarose support ●
RNA binding protein of interest RBP-X

Figure 1



Ribonome

The Ribonome is the entire collection of RNAs and their associated RNA binding proteins (RBPs).

Ribonomic Clusters

RAST™ segregates the ribonome into distinct ribonomic 'clusters' based upon a specific RBP. Genes within each cluster are identified by microarray.

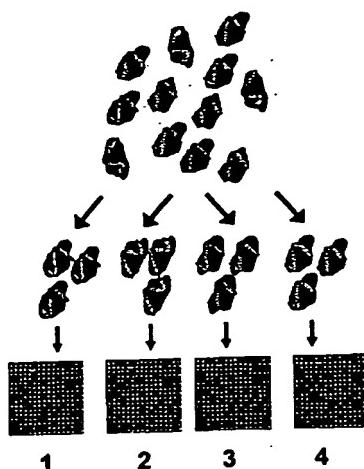


Figure 3

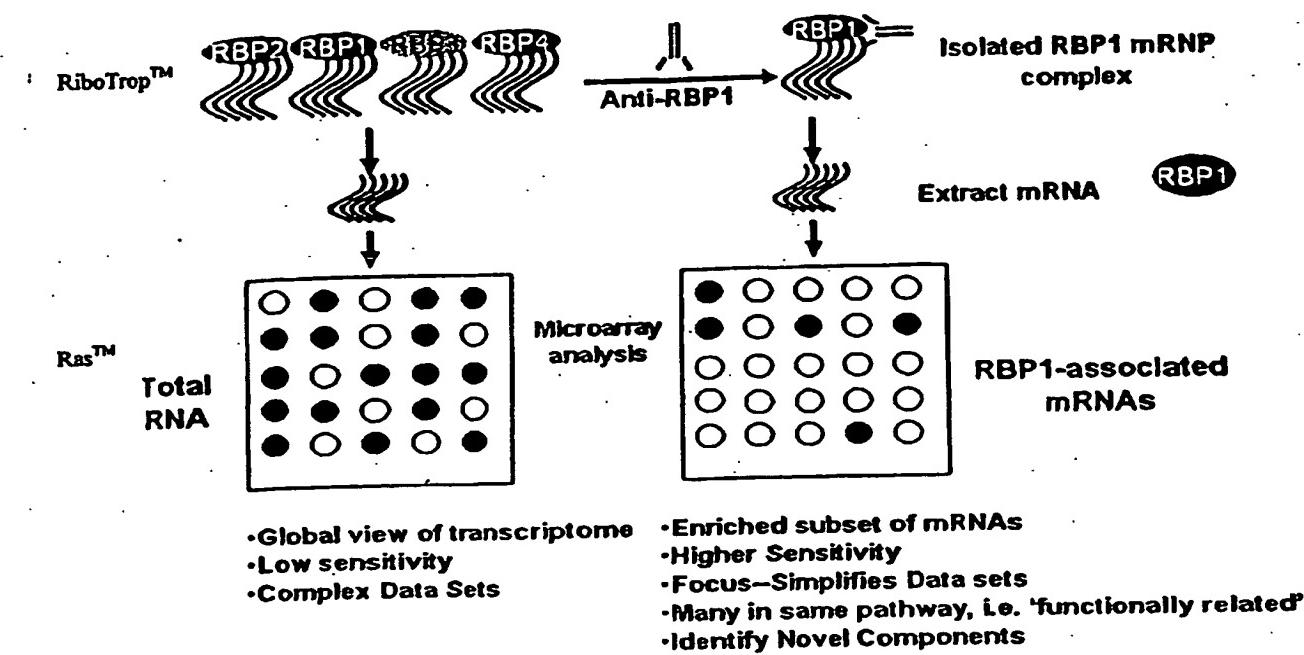


Figure 4

Expression of RNA Binding Protein Profile



Production of Antibodies to
RNA Binding Proteins



Immunoprecipitation of mRNP Complexes



Identification and Comparison of
RNAs in mRNP Complexes



Validation of the Biological Role of Genes
Encoding RNAs of mRNP Complexes

Figure 5

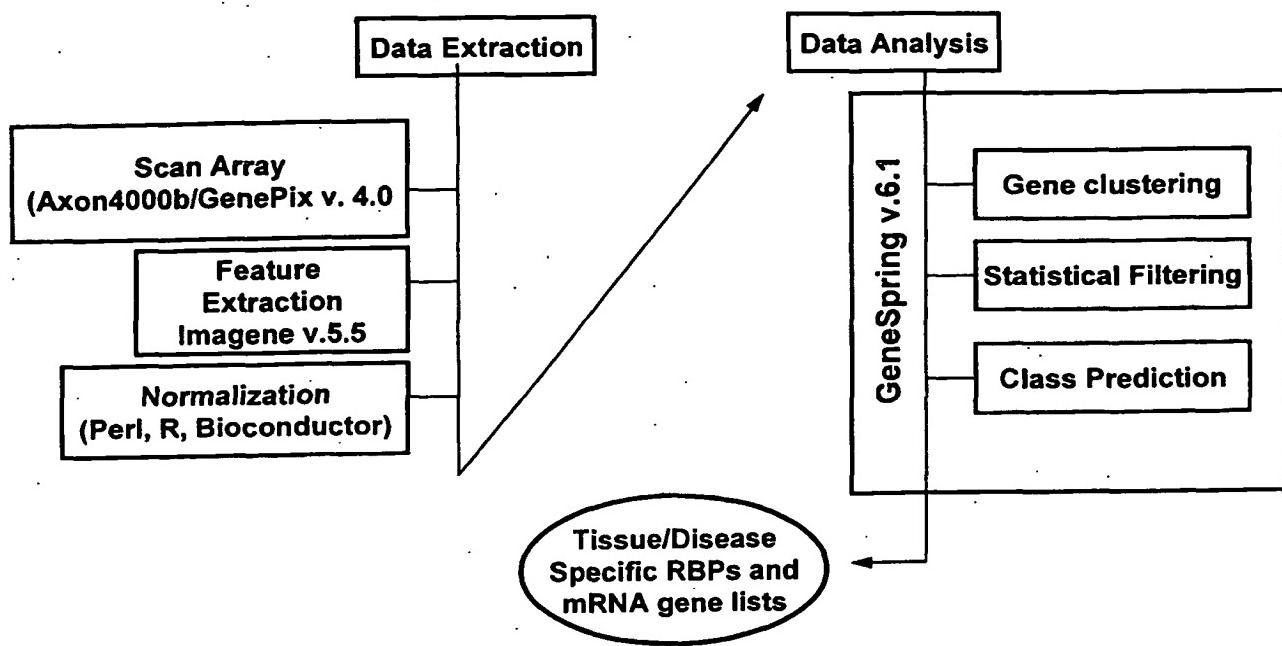


Figure 6

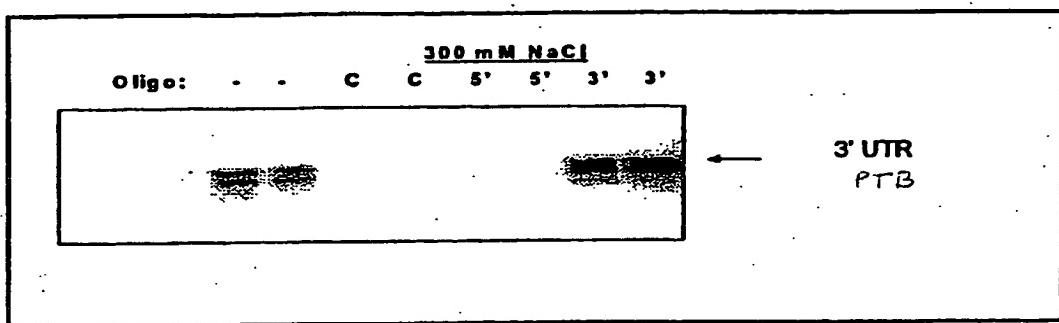
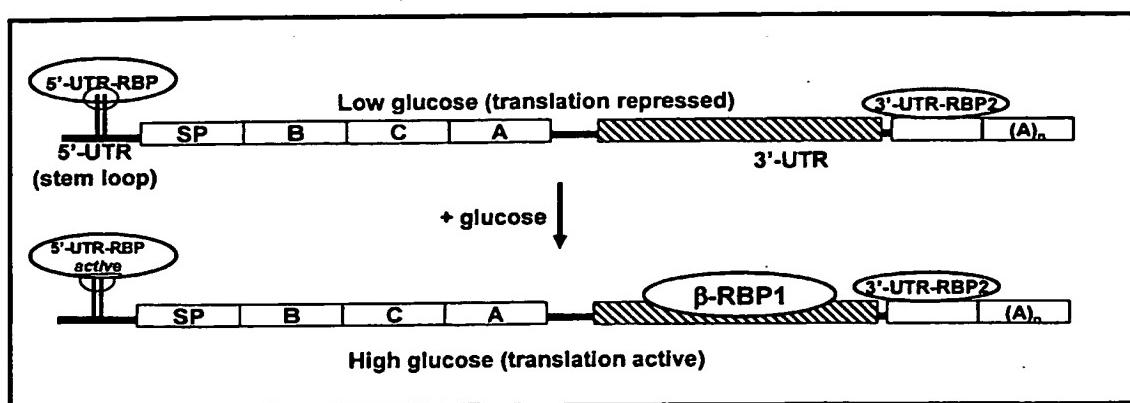


Figure 7



Model for binding of RBPs to preproinsulin mRNA

Figure 8

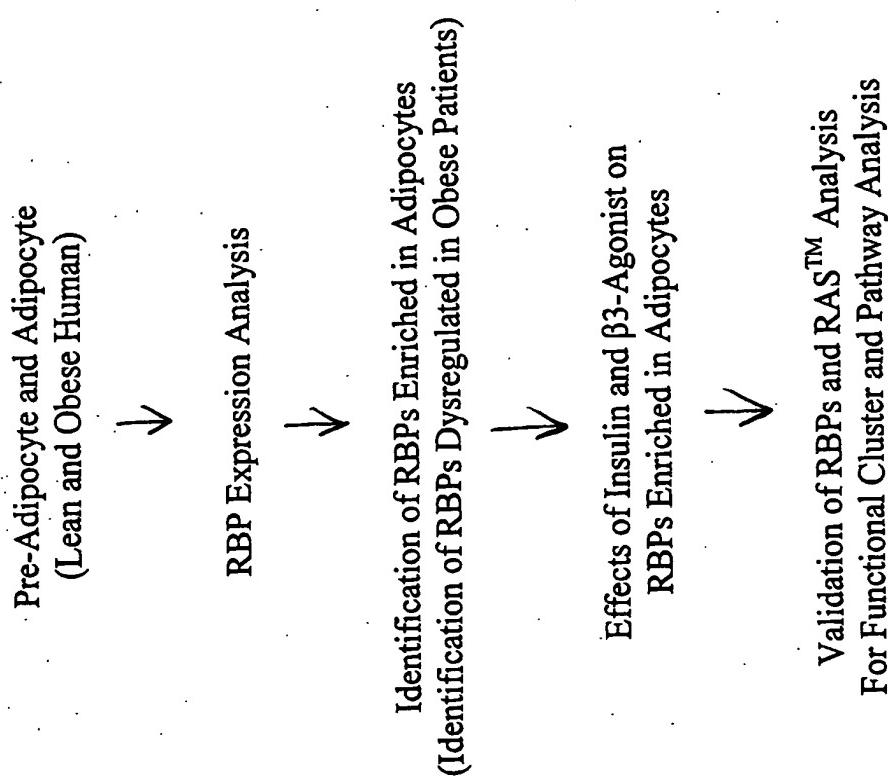


Figure 9

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
NM_006413	RPP30	NP_006404	Homo sapiens ribonuclease P/MRP 30kDa subunit (RPP30), mRNA.
NM_020967	NCOA5	NP_066018	Homo sapiens nuclear receptor coactivator 5 (NCOA5), mRNA.
NM_005058	RBMY1A1	NP_005049	Homo sapiens RNA binding motif protein, Y-linked, family 1, member A1 (RBMY1A1), mRNA.
NM_018380	DDX28	NP_060850	Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 28 (DDX28), nuclear gene encoding mitochondrial protein, mRNA.
NM_020158	RRP46	NP_064543	Homo sapiens exosome component Rrp46 (RRP46), mRNA.
XM_062047	LOC120470	XP_062047	Homo sapiens similar to discs, large (Drosophila) homolog 2, chaperonin-110 (LOC120470), mRNA.
NM_003429	ZNF85	NP_003420	Homo sapiens zinc finger protein 85 (HPF4, HTF1) (ZNF85), mRNA.
NM_005437	NCOA4	NP_005428	Homo sapiens nuclear receptor coactivator 4 (NCOA4), mRNA.
NM_000281	PCBD	NP_000272	Homo sapiens 6-pyruvoyl-tetrahydropterin synthase/dimerization cofactor of hepatocyte nuclear factor 1 alpha (TCF1) (PCBD), mRNA.
NM_022915	MRPL44	NP_075066	Homo sapiens mitochondrial ribosomal protein L44 (MRPL44), nuclear gene encoding mitochondrial protein, mRNA.
XM_068863	LOC134477	XP_068863	Homo sapiens similar to hypothetical protein CG-79 (LOC134477), mRNA.
AK000236		BAA91036	Homo sapiens cDNA FLJ20249 fts, clone COLF6821.
NM_002197	ACO1	NP_002188	Homo sapiens aconitase 1, soluble (ACO1), mRNA.
XM_064446	LOC139051	XP_066446	Homo sapiens similar to pol protein (LOC139051), mRNA.
NM_009989	RPL30	NP_009980	Homo sapiens ribosomal protein L30 (RPL30), mRNA.
NM_005119	THRAP3	NP_005110	Homo sapiens thyroid hormone receptor associated protein 3 (THRAP3), mRNA.
AF254411	SR-A1	AAF87552	Homo sapiens ser/arg-rich pre-mRNA splicing factor SR-A1 (SR-A1) gene, complete cds.
NM_006311	NCOR1	NP_006302	Homo sapiens nuclear receptor co-repressor 1 (NCOR1), mRNA.
MS8511	IREF-BP2/IRP2	AAA63901	Human iron-responsive element-binding protein/iron regulatory protein 2 (IREF-BP2/IRP2) mRNA, partial cds.

FIGURE 10

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
XM_065361	LOC129715	XP_065361	Homo sapiens similar to tudor protein (LOC129715), mRNA.
NM_019038	TDRD4	NP_061911	Homo sapiens tudor domain containing 4 (TDRD4), mRNA.
NM_022768	RBM15	NP_073605	Homo sapiens RNA binding motif protein 15 (RBM15), mRNA.
NM_000077	CDKN2A	NP_000068	Homo sapiens cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4) (CDKN2A), transcript variant 1, mRNA.
AB011167	KIAA0595	BAA25521	Homo sapiens mRNA for KIAA0595 protein, partial cds.
NM_022360	FAM12B	NP_071755	Homo sapiens family with sequence similarity 12, member B (epididymal) (FAM12B), mRNA.
XM_091042	LOC161682	XP_091042	Homo sapiens similar to data source: MGD, source key:MGI:107795, evidence: ISS-heterogeneous nuclear ribonucleoprotein C-putative (LOC61682), mRNA.
XM_089062	LOC148866	XP_089062	Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HELIIX-DESTABILIZING PROTEIN) (SINGLE-STRAND BINDING PROTEIN) (HNRNP CORE PROTEIN A1) (LOC148866), mRNA.
NM_063247	LOC122448	XP_063247	Homo sapiens similar to putative pancreatic ribonuclease (LOC122448), mRNA.
XM_061549	LOC119579	XP_061549	Homo sapiens LOC119579 (LOC119579), mRNA.
NM_016200	LSM8	NP_057284	Homo sapiens LSM8 homolog, U6 small nuclear RNA associated (S. cerevisiae) (LSM8), mRNA.
NM_017993	FLJ10094	NP_060463	Homo sapiens hypothetical protein FLJ10094 (FLJ10094), mRNA.
XM_061319	LOC119177	XP_061319	Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HELIIX-DESTABILIZING PROTEIN) (SINGLE-STRAND BINDING PROTEIN) (HNRNP CORE PROTEIN A1) (LOC119177), mRNA.
NM_007372	DDX42	NP_031398	Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 42 (DDX42), transcript variant 1, mRNA.
XM_092489	LOC165271	XP_092489	Homo sapiens similar to heterogeneous nuclear ribonucleoprotein K (LOC165271), mRNA.
NM_000967	RPL3	NP_000958	Homo sapiens ribosomal protein L3 (RPL3), mRNA.
NM_033117	RBM18	NP_149108	Homo sapiens RNA binding motif protein 18 (RBM18), mRNA.
AF285599	STK31	AAK31978	Homo sapiens serine/threonine kinase 31 (STK31) mRNA, complete cds.
NM_007363	NONO	NP_031389	Homo sapiens non-POU domain containing, octamer-binding (NONO), mRNA.
NM_002939	RNH	NP_002930	Homo sapiens ribonuclease/angiogenin inhibitor (RNH), transcript variant 1, mRNA.

Figure 10

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
XM_066901	LOC139801	XP_066901	Homo sapiens LOC139801 (LOC139801), mRNA.
NM_006074	TRIM22	NP_006065	Homo sapiens tripartite motif-containing 22 (TRIM22), mRNA.
XM_070605	LOC137786	XP_070605	Homo sapiens similar to ANTIGEN GOR (LOC137786), mRNA.
XM_090917	LOC161461	XP_090917	Homo sapiens LOC161461 (LOC161461), mRNA.
XM_093219	LOC170270	XP_093219	Homo sapiens similar to Heterogeneous nuclear ribonucleoprotein A3 homolog 2 (hnRNP A3(B)) (LOC170270), mRNA.
NM_004294	MTRF1	NP_004285	Homo sapiens mitochondrial translational release factor 1 (MTRF1), nuclear gene encoding mitochondrial protein, mRNA
NM_001605	AARS	NP_001596	Homo sapiens alanyl-tRNA synthetase (AARS), mRNA.
XM_066154	LOC133037	XP_066154	Homo sapiens LOC133037 (LOC133037), mRNA.
XM_094140	LOC166863	XP_094140	Homo sapiens similar to Apobec-1 complementation factor, APOBEC-1 stimulating protein (LOC166863), mRNA.
X99302	pop1	CAA67684	H.sapiens mRNA for Pop1 protein.
XM_066606	LOC139272	XP_066606	Homo sapiens similar to eukaryotic initiation factor 4B (LOC139272), mRNA.

Figure 10

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
XM_070830	LOC138280	XP_070830	Homo sapiens similar to KIAA1138 protein (LOC138280), mRNA.
XM_092489	LOC163271	XP_092489	Homo sapiens similar to heterogeneous nuclear ribonucleoprotein K (LOC165271), mRNA.
NM_006413	RPP30	NP_006404	Homo sapiens ribonuclease PMRP 30kDa subunit (RPP30), mRNA.
NM_002934	RNASE2	NP_002925	Homo sapiens ribonuclease, RNase A family, 2 (liver, eosinophil-derived neurotoxin) (RNASE2), mRNA.
NM_005058	RBMY1A1	NP_005049	Homo sapiens RNA binding motif protein, Y-linked, family 1, member A1 (RBMY1A1), mRNA.
NM_022360	FAM12B	NP_071755	Homo sapiens family with sequence similarity 12, member B (epididymal) (FAM12B), mRNA.
XM_065361	LOC129715	XP_065361	Homo sapiens similar to tudor protein (LOC129715), mRNA.
NM_020967	NCOA5	NP_066018	Homo sapiens nuclear receptor coactivator 5 (NCOA5), mRNA.
NM_001024	RPS21	NP_001015	Homo sapiens ribosomal protein S21 (RPS21), mRNA.
NM_006187	OAS3	NP_006178	Homo sapiens 2'-5'-oligoadenylate synthetase 3, 100kDa (OAS3), mRNA.
NM_031994	RNF17	NP_114383	Homo sapiens ring finger protein 17 (RNF17), transcript variant short, mRNA.
NM_000358	LOC127164	XP_060358	Homo sapiens similar to TAR DNA binding protein (LOC127164), mRNA.
NM_002534	OAS1	NP_002525	Homo sapiens 2',5'-oligoadenylate synthetase 1, 40/46kDa (OAS1), transcript variant E16, mRNA.
NM_018380	DDX28	NP_060850	Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 28 (DDX28), nuclear gene encoding mitochondrial protein, mRNA.

Figure 11

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	GeneBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
NM_025134	FLJ12178	NM_025134	FLJ12178	NP_079410	Homo sapiens hypothetical protein FLJ12178 (FLJ12178), mRNA.
XM_065361	LOC129715	XM_065361	LOC129715	XP_065361	Homo sapiens similar to tudor protein (LOC129715), mRNA.
NM_004768	SFRS11	NM_004768	SFRS11	NP_004759	Homo sapiens splicing factor, arginine/serine-rich 11 (SFRS11), mRNA.
XM_066446	LOC139051	XM_066446	LOC139051	XP_066446	Homo sapiens similar to pol protein (LOC139051), mRNA.
NM_004592	SFRS8	NM_004592	SFRS8	NP_004583	Homo sapiens splicing factor, arginine/serine-rich 8 (suppressor-of-white-apricot homolog, Drosophila) (SFRS8), transcript variant 2A, mRNA.
XM_069688	LOC136068	XM_069688	LOC136068	XP_069688	Homo sapiens LOC136068 (LOC136068), mRNA.
NM_022830	FLJ22347	NM_022830	FLJ22347	NP_073741	Homo sapiens hypothetical protein FLJ22347 (FLJ22347), mRNA.
NM_013235	RNASE3L	NM_013235	RNASE3L	NP_037367	Homo sapiens nuclear RNase III Drosha (RNASE3L), mRNA.
NM_003758	EIF3S1	NM_003758	EIF3S1	NP_003749	Homo sapiens eukaryotic translation initiation factor 3, subunit 1 alpha, 35kDa (EIF3S1), mRNA.
NM_005381	NCL	NM_005381	NCL	NP_005372	Homo sapiens nucleolin (NCL), mRNA.
NM_001145	ANG	NM_001145	ANG	NP_001136	Homo sapiens angiogenin, ribonuclease, RNase A family, 5 (ANG), mRNA.
XM_067085	LOC140121	XM_067085	LOC140121	XP_067085	Homo sapiens similar to heterogeneous nuclear ribonucleoprotein G (hnRNP G) (RNA binding motif protein, X chromosome) (LOC140121), mRNA.
XM_012968	LOC151921	XM_012968	LOC151921	XP_012968	Homo sapiens similar to chromosome 20 open reading frame 14; putative mitochondrial outer membrane protein import receptor; similar to yeast pre-mRNA splicing factors, Prp17er and Prp6 (LOC151921), mRNA.
NM_006170	NOL1	NM_006170	NOL1	NP_006161	Homo sapiens nucleolar protein 1, 120kDa (NOL1), mRNA.
NM_005617	RPS14	NM_005617	RPS14	NP_005608	Homo sapiens ribosomal protein S14 (RPS14), mRNA.

Figure 12

Protein Product		Description	
Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Reference	
NM_006546	IMP-1	NP_006537	Homo sapiens IGF-II mRNA-binding protein 1 (IMP-1), mRNA.
NM_004689	MTA1	NP_004680	Homo sapiens metastasis associated 1 (MTA1), mRNA.
NM_020143	LOC56902	NP_064528	Homo sapiens putative 28 kDa protein (LOC56902), mRNA.
NM_003096	SNRPG	NP_003087	Homo sapiens small nuclear ribonucleoprotein polypeptide G (SNRPG), mRNA.
NM_000947	PRIM2A	NP_000938	Homo sapiens primase, polypeptide 2A, 58kDa (PRIM2A), mRNA.
NM_006312	NCOR2	NP_006303	Homo sapiens nuclear receptor co-repressor 2 (NCOR2), mRNA.

Figure 12

Protein Product	GeneBank Accession Number or Manufacturer Sequence ID	Gene Name or Probe Name	Manufacturer Sequence Reference	Description
Nucleotide GenBank Accession Number or Manufacturer Sequence ID	NM_006312	NCOR2	NP_006303	Homo sapiens nuclear receptor co-repressor 2 (NCOR2), mRNA.
	NM_006546	IMP-1	NP_006537	Homo sapiens IGF-II mRNA-binding protein 1 (IMP-1), mRNA.
	NM_020143	LOC56902	NP_064528	Homo sapiens putative 28 kDa protein (LOC56902), mRNA.
	XM_047499	LOC149603	XP_047499	Homo sapiens hypothetical protein LOC149603 (LOC149603), mRNA.
	NM_018415	TRERF1	NP_060885	Homo sapiens transcriptional regulating factor 1 (TRERF1), transcript variant 3, mRNA.
	NM_000947	PRIM2A	NP_000938	Homo sapiens primase, polypeptide 2A, 58kDa (PRIM2A), mRNA.
	NM_013264	DDX25	NP_037396	Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 25 (DDX25), mRNA.
	XM_095071	CAGE	XP_095071	Homo sapiens cancer-associated gene (CAGE), mRNA.
	U23028		AAC50646	Human eukaryotic initiation factor 2B-epsilon mRNA, partial cds.
	NM_015891	CDC40	NP_056975	Homo sapiens cell division cycle 40 homolog (yeast) (CDC40), mRNA.
	NM_015453	DKFZP434F091	NP_056268	Homo sapiens DKFZP434F091 protein (DKFZP434F091), mRNA.
	NM_030794	TDRD3	NP_110421	Homo sapiens tudor domain containing 3 (TDRD3), mRNA.
	AF049523	HYPA	AAC27501	Homo sapiens huntingtin-interacting protein HYPA/FBP11 (HYPA) mRNA, partial cds.
	XM_088868	LOC163412	XP_088868	Homo sapiens LOC163412 (LOC163412), mRNA.
	NM_033030	BOLL	NP_149019	Homo sapiens bol, boule-like (<i>Drosophila</i>) (BOLL), transcript variant 2, mRNA.
	NM_022915	MRPL44	NP_075066	Homo sapiens mitochondrial ribosomal protein L44 (MRPL44), nuclear gene encoding mitochondrial protein mRNA.
	XM_087251	FLJ00166	XP_087251	Homo sapiens FLJ00166 protein (FLJ00166), mRNA.
	NM_003096	SNRPG	NP_003087	Homo sapiens small nuclear ribonucleoprotein polypeptide G (SNRPG), mRNA.
	NM_004937	CTNS	NP_004928	Homo sapiens cystinosis, nephropathic (CTNS), mRNA.
	NM_004689	MTA1	NP_004680	Homo sapiens metastasis associated 1 (MTA1), mRNA.
	AF026126	HNRPD	AAC23476	Homo sapiens heterogeneous nuclear ribonucleoprotein D (HNRPD) gene, complete cds.
	NM_002502	NFKB2	NP_002493	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100) (NFKB2), mRNA.
	AF254411	SR-A1	AAF87552	Homo sapiens ser/arg-rich pre-mRNA splicing factor SR-A1 (SR-A1) gene, complete cds.

Figure 13

17/89

Protein Product	GeneBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Manufacturer Sequence Reference	Description
Nucleotide GenBank Accession Number or Manufacturer Sequence ID	XM_064989	LOC126205	XP_064989	Homo sapiens similar to PYRIN-containing APAF1-like protein 7; mRNA; monarch 1 [Homo sapiens] (LOC126205), mRNA.
	XM_070263	LOC137165	XP_070263	Homo sapiens similar to ribosomal protein L3; 60S ribosomal protein L3; HIV-1 TAR RNA-binding protein B (LOC137165), mRNA.
	NM_006388	HTATIP	NP_006379	Homo sapiens HIV-1 Tat interactive protein, 60kDa (HTATIP), transcript variant 2, mRNA.
	NM_006209	ENPP2	NP_006200	Homo sapiens ectonucleotide pyrophosphatase/phosphodiesterase 2 (autotaxin) (ENPP2), mRNA.
	BC012090		AAH12090	Homo sapiens, Similar to heterogeneous nuclear ribonucleoprotein A3, clone MGC:20045 IMAGE:4661041 mRNA, complete cds.
	NM_001019	RPS15A	NP_001010	Homo sapiens ribosomal protein S15a (RPS15A), mRNA.
	NM_021133	RNASEL	NP_066956	Homo sapiens ribonuclease L (2',5'-oligoadenylate synthetase-dependent) (RNASEL), mRNA.
	NM_013235	RNASE3L	NP_037367	Homo sapiens nuclear RNase III Drosha (RNASE3L), mRNA.
	NM_015235	CSTF2T	NP_0566050	Homo sapiens cleavage stimulation factor, 3' pre-RNA, subunit 2, 64kDa, tau variant (CSTF2T), mRNA.
	NM_004094	EIF2S1	NP_004085	Homo sapiens eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa (EIF2S1), mRNA.
	NM_006163	NFE2	NP_006154	Homo sapiens nuclear factor (erytroid-derived 2), 45kDa (NFE2), mRNA.
	NM_014003	DHX38	NP_054722	Homo sapiens DEAH (Asp-Glu-Ala-His) box polypeptide 38 (DHX38), mRNA.
	NM_006789	APOBEC2	NP_006780	Homo sapiens apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 2 (APOBEC2), mRNA.
	NM_014285	RRP4	NP_055100	Homo sapiens homolog of Yeast RRP4 (ribosomal RNA processing 4), 3'-5'-exoribonuclease (RRP4), mRNA.
	NM_004175	SNRPD3	NP_004166	Homo sapiens small nuclear ribonucleoprotein D3 poly peptide 18kDa (SNRPD3), mRNA.
	AL117473	DKFZp727A071	CAB55948	Homo sapiens mRNA; cDNA DKFZp727A071 (from clone DKFZp727A071); partial cds.
	XM_085059	LOC145223	XP_085059	Homo sapiens similar to Splicing factor 3B subunit 4 (Spliceosome associated protein 49) (SAP 49) (SF3B4) (Pre-mRNA splicing factor SF3b 49 kDa subunit) (LOC145223), mRNA.

Figure 13

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Protein Product Gene Name or Manufacturer Probe Name	Manufacturer Sequence Reference	Description
NM_020158	RNP46	NP_064543	Homo sapiens exosome component Rrp46 (RRP46), mRNA.
NM_016024	CGI-79	NP_057108	Homo sapiens CGI-79 protein (CGI-79), mRNA.
XM_065361	LOC129715	XP_065361	Homo sapiens similar to tudor protein (LOC129715), mRNA.
XM_068863	LOC134477	XP_068863	Homo sapiens similar to Hypothetical protein CGI-79 (LOC134477), mRNA.
NM_006527	SLBP	NP_006518	Homo sapiens stem-loop (histone) binding protein (SLBP), mRNA.
NM_024321	MGC10433	NP_077297	Homo sapiens hypothetical protein MGC10433 (MGC10433), mRNA.
NM_003075	SMARCC2	NP_003066	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 2 (SMARCC2), transcript variant 1, mRNA.
NM_016955	SLA/LP	NP_058651	Homo sapiens soluble liver antigen/liver pancreas antigen (SLA/LP), mRNA.
NM_002819	PTBP1	NP_002810	Homo sapiens poly(pyrimidine tract binding protein 1 (PTBP1), transcript variant 1, mRNA.
NM_001021	RPS17	NP_001012	Homo sapiens poly(A) binding protein S17 (RPS17), mRNA.
NM_002568	PABPC1	NP_002559	Homo sapiens poly(A) binding protein, cytoplasmic 1 (PABPC1), mRNA.
NM_014871	USP52	NP_055686	Homo sapiens ubiquitin specific protease 52 (USP52), mRNA.
NM_003076	SMARCD1	NP_003067	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 1 (SMARCD1), transcript variant 1, mRNA.
NM_006547	IMP-3	NP_006538	Homo sapiens Igf-II mRNA-binding protein 3 (IMP-3), mRNA.
NM_025134	FLJ12178	NP_079410	Homo sapiens hypothetical protein FLJ12178 (FLJ12178), mRNA.
NM_002695	POLR2E	NP_002686	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E, 25kDa (POLR2E), mRNA.
NM_005801	SUI1	NP_005792	Homo sapiens putative translation initiation factor (SUI1), mRNA.
NM_022830	FLJ22347	NP_073741	Homo sapiens hypothetical protein FLJ22347 (FLJ22347), mRNA.
NM_012245	SNW1	NP_036377	Homo sapiens SK1-interacting protein (SNW1), mRNA.
NM_005617	RPS14	NP_005608	Homo sapiens ribosomal protein S14 (RPS14), mRNA.
NM_021134	MRPL23	NP_066957	Homo sapiens mitochondrial ribosomal protein L23 (MRPL23), nuclear gene encoding mitochondrial protein

Figure 13

XM_058421 LOC119832 XP_058421 Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HELIX-DESTABILIZING PROTEIN) (SINGLE-STRAND BINDING PROTEIN) (HNRNP CORE PROTEIN A1)
NM_006013 RPL10 NP_006004 Homo sapiens ribosomal protein L10 (RPL10), mRNA.

Figure 13

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
XM_085111	LOC145359	LOC145359		Homo sapiens similar to RIBONUCLEASE PANCREATIC PRECURSOR (RNASE 1) (RNASE A) (LOC145359), mRNA.
XM_047920	LOC92906	LOC127722		Homo sapiens similar to Unknown (protein for IMAGE:3587716) (LOC92906), mRNA.
XM_060628				Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HELIX-DESTABILIZING PROTEIN) (SINGLE-STRAND BINDING PROTEIN) (HNRNP CORE PROTEIN A1) (UNWINDING PROTEIN 1) (UP1) (LOC127722), mRNA.
XM_088640	LOC158685			Homo sapiens similar to RNA-binding region (RNP1, RRI) containing 2 (H. sapiens) (LOC158685), mRNA.
XM_017931	LOC158201			Homo sapiens similar to RNA binding motif protein, X chromosome (H. sapiens) (LOC158201), mRNA.
XM_062047	LOC120470			Homo sapiens similar to discs, large (Drosophila) homolog 2; chapsyn-110 (LOC120470), mRNA.
XM_068897	LOC134759			Homo sapiens similar to heterogeneous nuclear ribonucleoprotein L (LOC134759), mRNA.
XM_087697	LOC153522			Homo sapiens similar to splicing factor, arginine/serine-rich 11 (LOC153522), mRNA.
NM_003191	TARS			Homo sapiens threonyl tRNA synthetase (TARS), mRNA.
XM_061850	LOC120983			Homo sapiens similar to 48kD arginine/serine-rich splicing factor (LOC120983), mRNA.
XM_093219	LOC170270			Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A3 HOMOLOG 2 (HNRNP A3(B)) (LOC170270), mRNA.
XM_068457	LOC133655			Homo sapiens similar to splicing coactivator subunit SRm300; RNA binding protein, AT-rich element binding factor, serine/arginine repetitive matrix 2 (LOC133655), mRNA.
NM_014892	KIAA1116			Homo sapiens KIAA1116 protein (KIAA1116), mRNA.
XM_058819	LOC124540			Homo sapiens similar to RNA-binding protein Musashi2-S (LOC124540), mRNA.
XM_058653	LOC122651			Homo sapiens similar to RIBONUCLEASE PANCREATIC (RNASE 1) (RNASE A) (LOC122651), mRNA.
XM_093626	LOC152108			Homo sapiens similar to ubiquitin A-52 residue ribosomal protein fusion product 1 (LOC152108), mRNA.
XM_061002	LOC118523			Homo sapiens similar to SON DNA-binding protein; SON DNA-binding protein, SON DNA-binding protein, KIAA1019; NRE- binding protein (H. sapiens) (LOC118523), mRNA.
XM_060358	LOC127164			Homo sapiens similar to TAR DNA binding protein (LOC127164), mRNA.

Figure 14

Protein Product GeneBank Accession Number or Manufacturer Number or Sequence ID	Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Manufacturer Sequence Reference	Description
				Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (UNWINDING PROTEIN 1) (UP1) (LOC127741) (SINGLE-STRAND BINDING PROTEIN) (HNRNP CORE PROTEIN A1) (UNWINDING PROTEIN 1) (UP1) (LOC127741), mRNA.
XM_053612	XM_053601	LOC132341		Homo sapiens similar to poly(A) binding protein, cytoplasmic 1; poly(A)-binding protein, cytoplasmic 1 (LOC132928), mRNA.
NM_021993		FUSIP1		Homo sapiens FUS interacting protein (serine-arginine rich) 1 (FUSIP1) transcript variant 2, mRNA.
XM_064113		LOC124380		Homo sapiens similar to Hrb27C-P1; RNA-binding protein 7 (LOC124380), mRNA.
XM_093297		LOC153028		Homo sapiens similar to RNA binding protein S1, serine-rich domain (H. sapiens) (LOC153028), mRNA.
XM_062934		LOC122056		Homo sapiens similar to ATP-DEPENDENT RNA HELICASE A (NUCLEAR DNA HELICASE II) (NDH II) (DEAD-BOX PROTEIN 9) (LOC122056), mRNA.
XM_053153		LOC149873		Homo sapiens similar to RNA binding motif protein, X chromosome (H. sapiens) (LOC149873), mRNA.
XM_070603		LOC137784		Homo sapiens similar to ANTIGEN GOR (LOC137784), mRNA.
XM_086419		LOC149092		Homo sapiens similar to putillo homolog 1 (Drosophila) (H. sapiens) (LOC149092), mRNA.
XM_067918		LOC132383		Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HELIX-DESTABILIZING PROTEIN) (SINGLE-STRAND BINDING PROTEIN) (HNRNP CORE PROTEIN A1) (LOC132383), mRNA.
NM_006450		SPF45		Homo sapiens splicing factor (45kD) (SPF45), mRNA.
NM_004940		DDX7		Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 7 (RNA helicase, 52kD) (DDX7), mRNA.
XM_086011		LOC148027		Homo sapiens similar to Bruno-like 5, RNA binding protein BRUNOL-5 (LOC148027), mRNA.
XM_073386		LOC119594		CUG-BP and ETR-3 like factor 5, RNA-binding protein CUG-BP and ETR-3 like factor 5 (LOC119594), mRNA.
XM_067051		LOC140065		Homo sapiens similar to SPlicing FACTOR U2AF 65 KDA SUBUNIT (U2 AUXILIARY FACTOR 65 KDA SUBUNIT) (U2 SNRNP AUXILIARY FACTOR LARGE SUBUNIT) (U2AF65) (LOC140065), mRNA.
NM_003138		SPPK2		Homo sapiens similar to RNA binding motif protein 2 (LOC140065), mRNA.
XM_092386		LOC165115		Homo sapiens SFRS protein kinase 2 (SRPK2), mRNA.

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Manufacturer Probe Name	Description
XM_062047 XM_082031	LOC120470 LOC163147	Homo sapiens similar to discs, large (<i>Drosophila</i>) homolog 2; chapsyn-110 (LOC120470), mRNA. Homo sapiens similar to splicing factor 3a, subunit 2, 65kD; Spliceosome protein SAP-62 (LOC163147), mRNA.
XM_067074	LOC140100	Homo sapiens similar to RNA binding motif protein, Y chromosome, family 1, member A1; RNA binding motif protein Y, RNA binding motif protein 2 (LOC140100), mRNA.
XM_060102	LOC126635	Homo sapiens similar to splicing factor, arginine/serine-rich 2, interacting protein, SC35; interacting protein 1 (LOC126635), mRNA.
XM_001524 XM_087792	LOC151173 LOC150152	Homo sapiens similar to TAR DNA binding protein (H. sapiens) (LOC151173), mRNA. Homo sapiens similar to SPLICING FACTOR U2AF 35 KD SUBUNIT (U2 AUXILIARY FACTOR 35 KD SUBUNIT) (U2
XM_070605 NM_008842 XM_095999	LOC137786 SF3B2 LOC159732	SNRNP AUXILIARY FACTOR SMALL SUBUNIT (LOC150152), mRNA. Homo sapiens similar to ANTIGEN GOR (LOC137786), mRNA. Homo sapiens splicing factor 3b, subunit 2, 145kD (SF3B2), mRNA.
XM_066446 XM_087765 XM_089587	LOC139051 LOC143344 LOC159428	Homo sapiens similar to EXOSOME COMPLEX EXONUCLEASE RRP4 (RIBOSOMAL RNA PROCESSING PROTEIN 4) (LOC169732), mRNA. Homo sapiens similar to hypothetical protein (LOC139051), mRNA. Homo sapiens similar to poly(A) binding protein (LOC143344), mRNA.
XM_092043	LOC163160	Homo sapiens similar to polypyrimidine tract binding protein, isoform b; heterogeneous nuclear ribonucleoprotein polypeptide I; RNA binding protein (LOC163160), mRNA.
XM_091270	LOC161983	Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HELIX-DESTABILIZING PROTEIN) (SINGLE-STRAND BINDING PROTEIN) (HNRNP CORE PROTEIN A1) (LOC161983), mRNA.
XM_067072 XM_056568	LOC140098 LOC147774	Homo sapiens similar to RBM1 (LOC140098), mRNA. Homo sapiens similar to KH-type splicing regulatory protein (FUSE-binding protein 2) (H. sapiens) (LOC147774), mRNA.

Figure 14

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
XM_091235	LOC161931	LOC161931	Homo sapiens similar to hypothetical protein LOC161931; mRNA.
XM_058943	LOC125925	LOC125925	Homo sapiens similar to R32611_1 (LOC125925); mRNA.
XM_058876	LOC124944	LOC124944	Homo sapiens similar to putative (H. sapiens) (LOC124944); mRNA.
XM_088975	LOC148683	LOC148683	Homo sapiens similar to punillo homolog 1 (Drosophila); punilio (Drosophila) homolog 1 (LOC148683); mRNA.
XM_092221	LOC164891	LOC164891	Homo sapiens similar to mRNA for ribosomal protein S9 (LOC164891); mRNA.
XM_095591	LOC169242	LOC169242	Homo sapiens similar to putative (LOC169242); mRNA.
XM_093336	LOC165631	LOC165631	Homo sapiens similar to KIAA1288 protein (LOC165631); mRNA.
XM_065002	LOC126246	LOC126246	Homo sapiens similar to Similar to Splicing factor proline/glutamine rich (polypyrimidine tract-binding protein-associated) (H. sapiens) (LOC126246); mRNA.
XM_067452	LOC131596	LOC131596	Homo sapiens similar to splicing factor 3a, subunit 2, 66kD; Spliceosome protein SAP-62 (LOC131596); mRNA.
XM_062601	LOC121365	LOC121365	Homo sapiens similar to RBM1 (LOC121365); mRNA.
XM_066248	LOC133225	LOC133225	Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HELIX-DESTABILIZING PROTEIN) (SINGLE-STRAND BINDING PROTEIN) (HNRNP CORE PROTEIN A1) (H. sapiens) (LOC133225); mRNA.
XM_068022	LOC132772	LOC132772	Homo sapiens similar to split ends; polycephalon; yippee interacting protein 1 (LOC132772); mRNA.
XM_068901	LOC135801	LOC135801	Homo sapiens similar to splicing factor, arginine/serine-rich 4 (SRP75); similar to splicing factor, arginine/serine-rich 4 (SFRS4) (H. sapiens) (LOC135801); mRNA.
XM_067087	LOC140123	LOC140123	Homo sapiens similar to RNA binding protein (LOC140123); mRNA.
XM_067844	LOC132430	LOC132430	Homo sapiens similar to poly(A)-binding protein, cytoplasmic 4 (inducible form); inducible poly(A)-binding protein (LOC132430); mRNA.
XM_070624	LOC137819	AAHD0504	Homo sapiens similar to Rbm (H. sapiens) (LOC137819); mRNA.
BC005054			Homo sapiens, clone IMAGE:2822202; mRNA, partial cds.
NM_031994	RNF17	NP_114363	Homo sapiens ring finger protein 17 (RNF17), transcript variant short; mRNA.

Protein Product	GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Manufacturer Reference	Description	
	HSUB7389	LOC145359	AAB63112 XP_085111 NP_024045 NM_001021 AC004557 NM_004792 NM_001011 XM_047920 AI088192		Human endogenous retrovirus clone K1.1 polymerase mRNA, partial cds. Homo sapiens similar to Ribonuclease pancreatic precursor (RNase A) (LOC145359), mRNA. Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 50 (DDX50), mRNA. Homo sapiens ribosomal protein S17 (RPS17), mRNA. Homo sapiens PAC clone RP5-1093O17 from 7, complete sequence. Homo sapiens peptidyl-prolyl isomerase G (Cyclophilin G) (PPIG), mRNA. Homo sapiens ribosomal protein S7 (RPS7), mRNA. Homo sapiens similar to Unknown (protein for IMAGE:2587716) (LOC92906), mRNA. cz9712.x1 Soares_Parathyroid_tumor_Homo_sapiens cDNA clone IMAGE:1683334 3' similar to TR:Q38800 Q388
		PPIG RPS7 LOC92906	NP_004783 NP_001002 XP_047920	COL-O PUTATIVE RNA HELICASE A .. mRNA sequence.	
	NM_005058 XM_066628	RBMY1A1 LOC127722	NP_005049 XP_060628	Homo sapiens RNA binding motif protein Y-linked, family 1, member A1 (RBMY1A1), mRNA. Homo sapiens similar to Heterogeneous nuclear ribonucleoprotein A1 (Helix destabilizing protein) (Single-strand binding protein) (hnRNP core protein A1) (HDP-1) (Topoisomerase-inhibitor suppressed) (LOC127722), mRNA.	
	NM_020967 NM_005275 XM_088640 XM_017931	NCOA5 SFRS6 LOC158685 LOC158201	NP_066018 NP_005266 XP_088640 XP_017931	Homo sapiens nuclear receptor coactivator 5 (NCOA5), mRNA. Homo sapiens splicing factor, arginine-serine-rich 6 (SFRS6), mRNA. Homo sapiens similar to bA353C18.3.2 (splicing factor CC1.3, isoform 2 (CC1.4)) (LOC158685), mRNA. Homo sapiens similar to Heterogeneous nuclear ribonucleoprotein G (hnRNP G) (Glycoprotein P43) (LOC158201), mRNA.	
	NM_005016 NM_006713 NM_018427 NM_004960 AF267533 XM_062047	PCBP2 Pc4 RRN3 FUS LOC120470	NP_005007 NP_006704 NP_060897 NP_004951 AAFT8955 XP_062047	Homo sapiens poly(C) binding protein 2 (PCBP2), transcript variant 1, mRNA. Homo sapiens activated RNA polymerase II transcription cofactor 4 (PC4), mRNA. Homo sapiens RNA polymerase I transcription factor RRN3 (RRN3), mRNA. Homo sapiens fusion (involved in t(12;16) in malignant liposarcoma) (FUS), mRNA. Homo sapiens CUG-binding protein LYQ isoform mRNA, complete cds. Homo sapiens similar to discs, large (Drosophila) homolog 2, chaperon-110 (LOC120470), mRNA.	

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Manufacturer Gene Name or Probe Name	Manufacturer Probe Name	Description
NM_003797	EED	NP_003788	Homo sapiens embryonic ectoderm development (EED), transcript variant 1, mRNA.
NM_001025	RPS23	NP_001016	Homo sapiens ribosomal protein S23 (RPS23), mRNA.
NM_005156	ROD1	NP_005147	Homo sapiens ROD1 regulator of differentiation 1 (S. pombe) (ROD1), mRNA.
BC001050	NFATC3	AAH01050	Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3, transcript variant 1, mRNA [cDNA clone MGC:1495 IMAGE:3505987], complete cds.
NM_000281	PCBD	NP_000272	Homo sapiens 6-pyruvoyl-tetrahydropterin synthase/limanazine cofactor of hepatocyte nuclear factor 1 alpha (TCF1) (PCBD), mRNA.
XM_066997	LOC134759	XP_068997	Homo sapiens similar to heterogeneous nuclear ribonucleoprotein L (LOC134759), mRNA.
NM_005887	DLEU1	NP_005878	Homo sapiens deleted in lymphocytic leukemia, 1 (DLEU1), mRNA.
AF435977	SON	AAJ30810	Homo sapiens negative regulatory element-binding protein (SON) mRNA, complete cds, alternatively spliced.
NM_001002	RPLP0	NP_000993	Homo sapiens ribosomal protein, large, P0 (RPLP0), transcript variant 1, mRNA.
NM_000989	RPL30	NP_000980	Homo sapiens ribosomal protein L30 (RPL30), mRNA.
XM_007697	LOC153522	XP_087697	Homo sapiens similar to splicing factor, arginine/serine-rich 11 (LOC153522), mRNA.
AC004957		NP_004893	Homo sapiens PAC clone RP5-1093Q17 from 7, complete sequence.
NM_004902	RNPC2	NP_003182	Homo sapiens RNA-binding region (RNP1, RRM) containing 2 (RNPC2), transcript variant 2, mRNA.
NM_003191	TARS	NP_067000	Homo sapiens threonyl-RNA synthetase (TARS), mRNA.
NM_0021177	LSM2	NP_002939	Homo sapiens LSM2 homolog, U6 small nuclear RNA associated (S. cerevisiae) (LSM2), mRNA.
NM_002948	RPL15	XP_061850	Homo sapiens ribosomal protein L15 (RPL15), mRNA.
XM_061850	LOC120083	NP_004696	Homo sapiens similar to 46kD arginine/serine-rich splicing factor [Homo sapiens] (LOC120083), mRNA.
NM_004705	PRKRIR		Homo sapiens protein-kinase, interferon-inducible double stranded RNA dependent inhibitor, repressor of (IP58 repressor) (PRKRIR), mRNA.
XM_0033219	LOC170270	XP_093219	Homo sapiens similar to Heterogeneous nuclear ribonucleoprotein A3 homolog 2 (hnRNP A3(B)) (LOC170270), mRNA.
HSPPOP1	pop1	CAA67684	H.sapiens mRNA for Pop1 protein.
NM_001429	EP300	NP_001420	Homo sapiens E1A binding protein p300 (EP300), mRNA.

Figure 14

Protein Product	GeneBank Accession Number or Manufacturer	Gene Name or Sequence Reference	Description
	Nucleotide Sequence ID	Manufacture Probe Name	
NM_014168	HSPC133	NP_054887 NP_001959	Homo sapiens HSPC133 protein (HSPC133), mRNA. Homo sapiens eukaryotic translation initiation factor 4E (EIF4E), mRNA.
NM_001968	EIF4E	NP_005959	Homo sapiens heterogeneous nuclear ribonucleoprotein M (HNRPM), transcript variant 1, mRNA.
NM_005968	HNRPM	NP_006353	Homo sapiens synaptotagmin binding, cytoplasmic RNA interacting protein (SYNCRIP), mRNA.
NM_006372	SYNCRIP	NP_002127	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1), transcript variant 1, mRNA.
NM_002136	HNRPA1	NP_006629	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1), transcript variant 1, mRNA.
NM_006638	RPP40	NP_004530	Homo sapiens asparagine-tRNA synthetase (NARS), mRNA.
NM_004539	NARS		Homo sapiens PAC clone RP5-1093O17 from 7, complete sequence.
AC004957	dJ164F3	CAB55879	Human DNA sequence from clone RP1-164F3 on chromosome Xq21.33-23 Contains genes for DFN1 (deathness, X-linked progressive, DDP (X-LINKED DEAFNESS DYSTONIA PROTEIN)), BTK(Bruton agammaglobulinemia tyrosine kinase), RPL44(L44-like ribosomal protein), GLA (galactosidase, alpha) and FTP3 (HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN), ESTs, STSs, GSSs and CpG Islands, complete sequence.
HS164F3			
BC016283	ABC1	AAH16283	Homo sapiens ATP-binding cassette, sub-family E (OABP), member 1, mRNA (cDNA clone MGC:9023 IMAGE:3909151), complete cds.
NM_006392	NOL5A	NP_006383	Homo sapiens nucleolar protein 5A (56kDa with KKED repeat) (NOL5A), mRNA.
BC002395	SF3A3	AAH02395	Homo sapiens splicing factor 3a, subunit 3, 60kDa, mRNA (cDNA clone MGC:8445 IMAGE:2321350), complete cds.
NM_003769	SFRS9	NP_003760	Homo sapiens splicing factor, argininoserine-Itch 9 (SFRS9), mRNA.
NM_006743	RBM3	NP_006734	Homo sapiens RNA binding motif protein 3 (RBM3), mRNA.
AF165518	MAGOH	AAF86648	Homo sapiens MAGOH isoform (MAGOH) mRNA, complete cds.
NM_001402	EEF1A1	NP_001393	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1), mRNA.
NM_030594	CPEB1	NP_085097	Homo sapiens cytoplasmic polyadenylation element binding protein 1 (CPEB1), mRNA.
NM_001024	RPS21	NP_001015	Homo sapiens ribosomal protein S21 (RPS21), mRNA.

Figure 14

Nucleotide GenBank Accession	Gene Name or Manufacturer Sequence ID	Manufacturer Probe Name	Protein Product GenBank Accession Number or Manufacturer Sequence Reference	Description
NM_003488	AKAP1		NP_003479	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), nuclear gene encoding mitochondrial protein, transcript variant 1. mRNA.
AF038362	TAF-172	AAC04573		Homo sapiens TBP-associated factor 172 (TAF-172) mRNA, complete cds.
NM_004501	HNRPQ	NP_004492		Homo sapiens heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A) (HNRPU), transcript variant 2. mRNA.
NM_004396	DDX5	NP_004387		Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 5 (DDX5), mRNA.
NM_009968	RPL4	NP_000959		Homo sapiens ribosomal protein L4 (RPL4), mRNA.
NM_001028	RPS25	NP_001019		Homo sapiens ribosomal protein S25 (RPS25), mRNA.
NM_007367	RALY	NP_031393		Homo sapiens RNA binding protein (autoantigenic, hnRNP-associated with lethal yellow) (RALY), transcript variant 2, mRNA.
NM_004689	MTA1	NP_004680		Homo sapiens metastasis associated 1 (MTA1), mRNA.
XM_068457	LOC133655	XP_068457		Homo sapiens similar to splicing coactivator subunit SRm300; RNA binding protein; AT-rich element binding factor; serine/arginine repetitive matrix 2 (LOC133655), mRNA.
NM_003754	EIF3S5	NP_003745		Homo sapiens eukaryotic translation initiation factor 3, subunit 5 epsilon, 47kDa (EIF3S5), mRNA.
AC04957				Homo sapiens PAC clone RP5-1093O17 from 7, complete sequence.
NM_006711	RNPS1	NP_006702		Homo sapiens PAC clone RP5-1093O17 from 7, complete sequence.
NM_016480	PAIP2	NP_057564		Homo sapiens RNA binding protein S1; serine-rich domain (RNPS1), transcript variant 1, mRNA.
NM_001014	RPS10	NP_001005		Homo sapiens 40S ribosomal protein S10 (RPS10), mRNA.
AF070668		AAD20974		Homo sapiens 40S ribosomal protein S27 isoform mRNA, complete cds.
NM_006938	SNRPD1	NP_008869		Homo sapiens small nuclear ribonucleoprotein D1 polypeptide 16kDa (SNRPD1), mRNA.
NM_014892	RBM16	NP_055707		Homo sapiens RNA binding motif protein 16 (RBM16), mRNA.
NM_018353	C14orf106	NP_060823		Homo sapiens chromosome 14 open reading frame 106 (C14orf106), mRNA.
NM_006196	PCBP1	NP_006187		Homo sapiens poly(C) binding protein 1 (PCBP1), mRNA.
XM_058819	MSI2	XP_058819		Homo sapiens musashi homolog 2 (Drosophila) (MSI2), mRNA.

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Manufacturer Gene Name or Probe Name	Manufacture Reference	Description
NM_003133	SRP9	NP_003124	Homo sapiens signal recognition particle 9kDa (SRP9), mRNA.
NM_001016	RPS12	NP_001007	Homo sapiens ribosomal protein S12 (RPS12), mRNA.
NM_004516	ILF3	NP_004507	Homo sapiens interleukin enhancer binding factor 3, 90kDa (ILF3), transcript variant 2, mRNA.
XM_058653	LOC122651	XP_058653	Homo sapiens LOC122651 (LOC122651), mRNA.
NM_003750	EIF3S10	NP_003741	Homo sapiens eukaryotic translation initiation factor 3, subunit 10 theta, 150/170kDa (EIF3S10), mRNA.
AK03960			Homo sapiens cDNA FLJ30398 1fs, clone BRACE2003402, highly similar to Homo sapiens steroid receptor RNA activator isoform 3 mRNA.
NM_017697	FLJ20171	NP_060167	Homo sapiens hypothetical protein FLJ20171 (FLJ20171), mRNA.
NM_000985	RPL17	NP_000976	Homo sapiens ribosomal protein L17 (RPL17), mRNA.
HSM801037			Homo sapiens cDNA DKFZp434L1935 (from clone DKFZp434L1935).
NM_014060	MCTS1	NP_054779	Homo sapiens malignant T cell amplified sequence 1 (MCTS1), mRNA.
NM_014463	LSM3	NP_055278	Homo sapiens LSM3 homolog; U6 small nuclear RNA associated (<i>S. cerevisiae</i>) (LSM3), mRNA.
AF294007		AAG31577	Homo sapiens haplotype 1 eosinophil-derived neurotoxin gene, complete cds.
NM_003092	SNRPB2	NP_003083	Homo sapiens small nuclear ribonucleoprotein polypeptide B" (SNRPB2), transcript variant 1, mRNA.
NM_001418	EIF4G2	NP_001409	Homo sapiens eukaryotic translation initiation factor 4 gamma, 2 (EIF4G2), mRNA.
NM_006802	SF3A3	NP_066793	Homo sapiens splicing factor 3a, subunit 3, 60kDa (SF3A3), mRNA.
XM_033626	LOC52108	XP_093626	Homo sapiens similar to ubiquitin A-52 residue ribosomal protein fusion product 1 (LOC52108), mRNA.
BC000138	HNRPM	AAH00138	Homo sapiens heterogeneous nuclear ribonucleoprotein M, transcript variant 1, mRNA (cDNA clone MGC:5136 IMAGE:2900532), complete cds.
NM_007040	HNRPU1	NP_008971	Homo sapiens heterogeneous nuclear ribonucleoprotein U-like 1 (HNRPU1), transcript variant 1, mRNA.
NM_003908	EIF3S2	NP_003899	Homo sapiens eukaryotic translation initiation factor 2, subunit 2 beta, 38kDa (EIF3S2), mRNA.
NM_000994	RPL32	NP_000985	Homo sapiens ribosomal protein L32 (RPL32), mRNA.
NM_003757	EIF3S2	NP_003748	Homo sapiens eukaryotic translation initiation factor 3, subunit 2 beta, 36kDa (EIF3S2), mRNA.
NM_080632	UPF3B	NP_542199	Homo sapiens UPF3 regulator of nonsense transcripts homolog B (yeast) (UPF3B), transcript variant 1, mRNA.

Figure 14

Nucleotide GenBank Accession Number or Sequence ID	Manufacturer Name	Gene Name or Manufacturer Probe Name	Manufacturer Sequence Reference	Description
AB002310	KIAA0312	KIAA0312	BAA20771	Homo sapiens mRNA for KIAA0312 gene, partial cds.
NM_001005	RPS3	RPS3	NP_000996	Homo sapiens ribosomal protein S3 (RPS3), mRNA.
NM_016638	ARL6IP4	ARL6IP4	NP_057722	Homo sapiens ADP-ribosylation-like factor 6 interacting protein 4 (ARL6IP4), mRNA.
NM_018387	STRBP	STRBP	NP_060857	Homo sapiens spermatid perinuclear RNA binding protein (STRBP), mRNA.
NM_001212	C1QBP	C1QBP	NP_001203	Homo sapiens complement component 1, q subcomponent binding protein (C1QBP), nuclear gene encoding mitochondrial protein, mRNA.
NM_004985	KRAS2	KRAS2	NP_004976	Homo sapiens v-Ki-ras2 Kirsten rat sarcoma 2 viral oncogene homolog (KRAS2), transcript variant b, mRNA.
XM_061002	LOC118523	LOC118523	XP_061002	Homo sapiens LOC118523 (LOC118523), mRNA.
NM_003759	RNMT	RNMT	NP_003790	Homo sapiens RNA (guanine-7-) methyltransferase (RNMT), mRNA.
NM_021190	PTBP2	PTBP2	NP_067013	Homo sapiens polyimidine tract binding protein 2 (PTBP2), mRNA.
NM_030980	FLJ12671	FLJ12671	NP_112242	Homo sapiens hypothetical protein FLJ12671 (FLJ12671), mRNA.
NM_000971	RPL7	RPL7	NP_000962	Homo sapiens ribosomal protein L7 (RPL7), mRNA.
NM_000995	RPL34	RPL34	NP_000986	Homo sapiens ribosomal protein L34 (RPL34), transcript variant 1, mRNA.
NM_007006	CPSF5	CPSF5	NP_008937	Homo sapiens cleavage and polyadenylation specific factor 5, 25 kDa (CPSF5), mRNA.
NM_003429	ZNF85	ZNF85	NP_003420	Homo sapiens zinc finger protein 85 (HPF4, HITF1) (ZNF85), mRNA.
NM_006112	PPIE	PPIE	NP_006103	Homo sapiens peptidylprolyl isomerase E (cyclophilin E) (PPIE), transcript variant 1, mRNA.
NM_014502	PRP19	PRP19	NP_055317	Homo sapiens PRP19/PSO4 homolog (S. cerevisiae) (PRP19), mRNA.
AC004858	WUGSC:H_DJ0687K01.2	WUGSC:H_DJ0687K01.2	AAF19255	Homo sapiens PAC clone RP4-687K1 from 14, complete sequence.
NM_060358	LOC127164	LOC127164	XP_060358	Homo sapiens similar to TAR DNA binding protein (LOC127164), mRNA.
NM_003819	PABPC4	PABPC4	NP_003810	Homo sapiens poly(A) binding protein, cytoplasmic 4 (inducible form) (PABPC4), mRNA.
AB014564	KIAA0664	KIAA0664	BA431639	Homo sapiens mRNA for KIAA0664 protein, partial cds.
NM_022170	WBSCR1	WBSCR1	NP_071496	Homo sapiens Williams-Beuren syndrome chromosome region 1 (WBSCR1), transcript variant 1, mRNA.
NM_005087	FXR1	FXR1	NP_005078	Homo sapiens fragile X mental retardation, autosomal homolog 1 (FXR1), mRNA.
NM_003680	YARS	YARS	NP_003671	Homo sapiens tyrosyl-tRNA synthetase (YARS), mRNA.

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Manufacturer Probe Name	Description
NM_004500 AC004858	HNRPC WUGSC:H_D0687K01.2	NP_004491 AAF19255	Homo sapiens heterogeneous nuclear ribonucleoprotein C (C1C2) (HNRPC), transcript variant 2, mRNA. Homo sapiens PAC clone RP4-687K1 from 14, complete sequence.
NM_002887 NM_020414 NM_014871 XM_063601	RARS DDX24 USP52 LOC123341	NP_002878 NP_065147 NP_055686 XP_063601	Homo sapiens arginyl-tRNA synthetase (RARS), mRNA. Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 24 (DDX24), mRNA. Homo sapiens ubiquitin specific protease 52 (USP52), mRNA. Homo sapiens similar to Heterogeneous nuclear ribonucleoprotein A1 (Helix destabilizing protein) (Single-strand binding protein) (hnRNP core protein A1) (HDP) (LOC123341), mRNA.
NM_000988 AF266720S4 NM_001967 XM_096612 NM_018959 NM_004294	RPL27 RBMX EIF4A2 LOC132928 DAZAP1 MTRF1	NP_000979 AAK58867 NP_001958 XP_059612 NP_061832 NP_004285	Homo sapiens ribosomal protein L27 (RPL27), mRNA. Homo sapiens RBMX (RBMX) gene, exons 6 through 9 and complete cds. Homo sapiens eukaryotic translation initiation factor 4A, isoform 2 (EIF4A2), mRNA. Homo sapiens similar to polyA binding protein (AA-1-533) (LOC132928), mRNA. Homo sapiens DAZ associated protein 1 (DAZAP1), transcript variant 2, mRNA. Homo sapiens mitochondrial translational release factor 1 (MTRF1), nuclear gene encoding mitochondrial protein, mRNA.
NM_001031 AB046830 NM_0017358 AF083441 NM_014393 NM_017544 AF155096 NM_015703 NM_021993 NM_001970	RPS28 KIAA1610 M96 STAU2 NRF CGI-96 FLISIP2 EIF5A	NP_001022 BAB13436 NP_031384 AAD52028 NP_055208 NP_060014 AAD42862 NP_056518 NP_068833 NP_001981	Homo sapiens ribosomal protein S28 (RPS28), mRNA. Homo sapiens mRNA for KIAA1610 protein, partial cds. Homo sapiens likely ortholog of mouse metal response element binding transcription factor 2 (M96), mRNA. Homo sapiens SU11 isolog mRNA, complete cds. Homo sapiens stau1, RNA binding protein, homolog 2 (Drosophila) (STAU2), mRNA. Homo sapiens NF-kappa B-repressing factor (NRF), mRNA. Homo sapiens NY-REN-6 antigen mRNA, partial cds. Homo sapiens CGI-96 protein (CGI-96), mRNA. Homo sapiens FUS interacting protein (serine-arginine rich) 2 (FLISIP2), mRNA. Homo sapiens eukaryotic translation initiation factor 5A (EIF5A), mRNA.

Protein Product	GeneBank Accession Number or Manufacturer Sequence ID	Manufacturer or Sequence Reference	Description
	NM_012322	LSM5 NP_036454	Homo sapiens LSM5 homolog, U6 small nuclear RNA associated (S. cerevisiae) (LSM5), mRNA.
	NM_003142	SSB NP_003133	Homo sapiens Sjogren syndrome antigen B (autoantigen La) (SSB), mRNA.
	NM_003017	SFRS3 NP_003008	Homo sapiens splicing factor, arginine/serine-rich 3 (SFRS3), mRNA.
	AC04957		Homo sapiens PAC clone RP5-1093O17 from 7, complete sequence.
	NM_001019	RPS15A NP_001010	Homo sapiens ribosomal protein S15a (RPS15A), mRNA.
	NM_005782	THOCA NP_005773	Homo sapiens THO complex 4 (THOCA), mRNA.
	NM_006924	SFRS1 NP_008855	Homo sapiens splicing factor, arginine/serine-rich 1 (splicing factor 2, alternate splicing factor) (SFRS1), mRNA.
	NM_031369	HNRPD NP_112737	Homo sapiens heterogeneous nuclear ribonucleoprotein D (AU-rich element RNA binding protein 1, 37kDa) (HNRPD), transcript variant 2, mRNA.
		MASK NP_065741	Homo sapiens multiple alkyrin repeats, single KH-domain (MASK) homolog (MASK), mRNA.
		P14 NP_057131	Homo sapiens pre-mRNA branch site protein p14 (P14), mRNA.
		EIF4G1 NP_004944	Homo sapiens eukaryotic translation initiation factor 4 gamma, 1 (EIF4G1), transcript variant 5, mRNA.
		FUSIP1 NP_006616	Homo sapiens FUS interacting protein (serine-arginine rich) 1 (FUSIP1), transcript variant 1, mRNA.
		RPL41 NP_066927	Homo sapiens ribosomal protein L41 (RPL41), mRNA.
		CARS NP_0011742	Homo sapiens cysteiny-ltRNA synthetase (CARS), transcript variant 2, mRNA.
		HNRPL NP_001524	Homo sapiens heterogeneous nuclear ribonucleoprotein L (HNRPL), mRNA.
		DDX6 NP_004388	Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 6 (DDX6), mRNA.
		TRIM28 NP_005753	Homo sapiens tripartite motif-containing 28 (TRIM28), mRNA.
		EIF3S3 NP_003747	Homo sapiens eukaryotic translation initiation factor 3, subunit 3 gamma, 40kDa (EIF3S3), mRNA.
		RPS18 NP_022551	Homo sapiens ribosomal protein S18 (RPS18), mRNA.
		EIF2B3 NP_020365	Homo sapiens eukaryotic translation initiation factor 2B, subunit 3 gamma, 58kDa (EIF2B3), mRNA.
		XM_047499 NP_047499	Homo sapiens hypothetical protein LOC149603 (LOC149603), mRNA.
		NM_006548 NP_006539	Homo sapiens IgF-II mRNA-binding protein 2 (IMP-2), mRNA.
		NM_000984 RPL23A NP_000975	Homo sapiens ribosomal protein L23a (RPL23A), mRNA.

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
NM_001022	RPS19	NP_001013	Homo sapiens ribosomal protein S19 (RPS19), mRNA.
NM_005617	RPS14	NP_005608	Homo sapiens ribosomal protein S14 (RPS14), mRNA.
NM_003187	TAF9	NP_003178	Homo sapiens TAF9 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 32kDa (TAF9), transcript variant 1, mRNA.
NM_006386	DDX17	NP_006377	Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 17 (DDX17), transcript variant 1, mRNA.
NM_000990	RPL27A	NP_000981	Homo sapiens ribosomal protein L27a (RPL27A), mRNA.
NM_006850	SF3B4	NP_005841	Homo sapiens splicing factor 3b, subunit 4, 49kDa (SF3B4), mRNA.
AC004957	RTCD1	NP_003720	Homo sapiens PAC clone RP5-1093O17 from 7, complete sequence.
NM_003729	PAP1	NP_006442	Homo sapiens RNA terminal phosphate cyclase domain 1 (RTCD1), mRNA.
NM_006451	HNRPA2B1	NP_002128	Homo sapiens poly(A) binding protein interacting protein 1 (PAP1), transcript variant 1, mRNA.
NM_002137	RPS5	NP_001000	Homo sapiens heterogeneous nuclear ribonucleoprotein A2/B1 (HNRPA2B1), transcript variant A2, mRNA.
NM_001009	TARBP1	NP_005637	Homo sapiens TAR (HIV) RNA binding protein 1 (TARBP1), mRNA.
NM_005846	RAP1B	NP_056461	Homo sapiens RAP1B, member of RAS oncogene family (RAP1B), mRNA.
NM_015646	LOC124380	XP_064113	Homo sapiens LOC124380 (LOC124380), mRNA.
XM_064113	PRPF4	NP_004688	Homo sapiens PRPF4 pre-mRNA processing factor 4 homolog (yeast) (PRPF4), mRNA.
NM_004697	AC004957	NP_001349	Homo sapiens PAC clone RP5-1093O17 from 7, complete sequence.
AC004957	DHX15	NP_005511	Homo sapiens DEAH (Asp-Glu-Ala-His) box polypeptide 15 (DHX15), mRNA.
NM_001358	HNRPH1	NP_003324	Homo sapiens heterogeneous nuclear ribonucleoprotein H1 (H) (HNRPH1), mRNA.
NM_005520	UBA52	XP_098297	Homo sapiens ubiquitin A-52 residue ribosomal protein fusion product 1 (UBA52), mRNA.
NM_003333	LOC153028	NP_006550	Homo sapiens similar to RNA binding protein S1, serine-rich domain (H. sapiens) (LOC153028), mRNA.
XM_098297	KHDRBS1	AAH0595	Homo sapiens KH domain containing, RNA binding, signal transduction associated 1 (KHDRBS1), mRNA.
NM_006559	DDX17		Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 17, mRNA (cDNA clone MGC:2030 IMAGE:3345982), complete cds.
BC006595			
NM_001006	RPS3A	NP_000997	Homo sapiens ribosomal protein S3A (RPS3A), mRNA.

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Manufacturer Reference	Description
NM_005870	SAP18	NP_008861 NP_055227	Homo sapiens sin3-associated polypeptide, 18kDa (SAP18), mRNA. Homo sapiens Siah-interacting protein (SIP), mRNA.
NM_014412	SIP	NP_009035	Homo sapiens protein L10a (RPL10A), mRNA.
NM_007104	RPL10A	NP_005112	Homo sapiens thyroid hormone receptor associated protein 1 (THRAP1), mRNA.
NM_005121	THRAP1	NP_542394	Homo sapiens similar to RIKEN cDNA 4333424N09 gene (MGC16943), mRNA.
NM_086633	MGC16943	NP_006065	Homo sapiens tripartite motif-containing 22 (TRIM22), mRNA.
NM_006074	TRIM22	NP_002941	Homo sapiens ribophorin I (RPN1), mRNA.
NM_002950	RPN1	XP_062934	Homo sapiens similar to ATP-dependent RNA helicase A (Nuclear DNA helicase II) (NDH II) (DEAD-box protein 9) (LOC122056), mRNA.
XM_062934	LOC122056		
NM_033117	RBM18	NP_149108	Homo sapiens RNA binding motif protein 18 (RBM18), mRNA.
NM_005034	POLR2K	NP_005025	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide K, 7.0kDa (POLR2K), mRNA.
NM_006805	HNRPA0	NP_006796	Homo sapiens heterogeneous nuclear ribonucleoprotein A0 (HNRPA0), mRNA.
NM_002696	POLR2G	NP_002687	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide G (POLR2G), mRNA.
NM_002140	HNRPK	NP_002131	Homo sapiens heterogeneous nuclear ribonucleoprotein K (HNRPK), transcript variant 1, mRNA.
XM_053153	LOC149973	XP_053153	Homo sapiens similar to RNA binding motif protein, X chromosome (H. sapiens) (LOC149973), mRNA.
XM_070603	LOC137784	XP_070603	Homo sapiens similar to ANTIGEN GOR (LOC137784), mRNA.
NM_002938	RNF4	NP_002929	Homo sapiens ring finger protein 4 (RNF4), mRNA.
XM_086419	LOC149092	XP_086419	Homo sapiens similar to pumilio homolog 1 (Drosophila) (H. sapiens) (LOC149092), mRNA.
AC044957			Homo sapiens PAC clone RP5-1093Q17 from 7, complete sequence.
NM_002520	NPM1	NP_002511	Homo sapiens nucleophosmin (nucleolar phosphoprotein B23, numatrin) (NPM1), mRNA.
NM_005437	NCOA4	NP_005428	Homo sapiens nuclear receptor coactivator 4 (NCOA4), mRNA.
NM_001000	RPL39	NP_000991	Homo sapiens ribosomal protein L39 (RPL39), mRNA.
NM_000969	RPL5	NP_000960	Homo sapiens ribosomal protein L5 (RPL5), mRNA.
NM_000973	RPL8	NP_000964	Homo sapiens ribosomal protein L8 (RPL8), transcript variant 1, mRNA.
NM_003651	CSDA	NP_003642	Homo sapiens cold shock domain protein A (CSDA), mRNA.

Description HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HELIX-DESTABILIZING PROTEIN)					
Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Manufacturer Probe Name	Gene Name or Probe Name	Reference	Protein Product GeneBank Accession Number or Manufacturer Sequence	
XM_067918	LOC132583	XP_067918	Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (LOC132583), mRNA.		
NM_006450	SPF45	NP_006441	Homo sapiens splicing factor (45kD) (SPF45), mRNA.		
NM_014912	CPEB3	NP_055727	Homo sapiens cytoplasmic polyadenylation element binding protein 3 (CPEB3), mRNA.		
NM_001326	CSTF3	NP_001317	Homo sapiens cleavage stimulation factor, 3' pre-RNA, subunit 3, 77kDa (CSTF3), mRNA.		
NM_004940	DDX7	NP_004931	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp)/His box polypeptide 7 (RNA helicase, 52kDa) (DDX7), mRNA.		
NM_005021	ENPP3	NP_056012	Homo sapiens ectonucleotide pyrophosphatase/phosphodiesterase 3 (ENPP3), mRNA.		
NM_006047	RBM12	NP_066038	Homo sapiens RNA binding motif protein 12 (RBM12), transcript variant 1, mRNA.		
NM_014676	PUM1	NP_055491	Homo sapiens pumilio homolog 1 (Drosophila) (PUM1), mRNA.		
NM_002786	PSMA1	NP_002777	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 1 (PSMA1), transcript variant 2, mRNA.		
 HUMAN TIAR					
XM_086011	LOC148027	AAA36384 XP_086011	Homo sapiens nucleolin TIAR mRNA, complete cds.		
NM_000967	RPL3	NP_000958	Homo sapiens similar to Bruno-like 5, RNA binding protein (Drosophila); Bruno (Drosophila)-like 5, RNA binding protein; CUG-BP and ETR-3 like factor 5; RNA-binding protein BRUNOL-5 (LOC148027), mRNA.		
NM_014071	NCOA6	NP_054790	Homo sapiens ribosomal protein L3 (RPL3), mRNA.		
XM_073386	LOC119594	XP_073386	Homo sapiens nuclear receptor coactivator 6 (NCOA6), mRNA.		
 SNRNP AUXILIARY FACTOR U2A SUBUNIT (U2 AUXILIARY FACTOR 65 KDA SUBUNIT) U2					
NM_000982	RPL21	NP_000973	Homo sapiens ribosomal protein L21 (RPL21), mRNA.		
AF062105	IGH	AAC18141	Homo sapiens clone 21u-19 immunoglobulin heavy chain variable region (IGH) mRNA, partial cds.		
NM_006414	RPP38	NP_006405	Homo sapiens ribonuclease PMRP 38kDa subunit (RPP38), transcript variant 2, mRNA.		
NM_004599	SREBF2	NP_004590	Homo sapiens sterol regulatory element binding transcription factor 2 (SREBF2), mRNA.		
NM_007273	REA	NP_009204	Homo sapiens repressor of estrogen receptor activity (REA), mRNA.		
NM_002453	MTIF2	NP_002444	Homo sapiens mitochondrial translational initiation factor 2 (MTIF2), nuclear gene encoding mitochondrial protein, mRNA.		

Figure 14

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Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Description
AF380184		SON	Homo sapiens SON DNA binding protein isoform F (SON) mRNA, complete cds, alternatively spliced.
HUMRNAHELA NM_006929 AK001652	DDX9 SKIV2L	AAL34502 AAB48855 NP_008860 BAA91812	Human RNA helicase A mRNA, complete cds. Homo sapiens superkiller viralicidic activity 2-like (S. cerevisiae) (SKIV2L), mRNA. Homo sapiens cDNA FLJ10790 fis, clone NT2RP4000518, weakly similar to ATP-DEPENDENT RNA HELICASE ROK1.
AF037448		GRY-RBP	Homo sapiens RRM RNA binding protein GRY-Rbp (GRY-RBP) mRNA, complete cds.
NM_000977 NM_016024 AB044971 NM_000996 NM_031277 XM_067051	RPL13 CGI-79 nopp34 RPL35A RNIF17 LOC140065	NP_000968 NP_057108 BAB41210 NP_00987 NP_112567 XP_067051	Homo sapiens ribosomal protein L13 (RPL13), transcript variant 1, mRNA. Homo sapiens CGI-79 protein (CGI-79), mRNA. Homo sapiens mRNA for nucleolar phosphoprotein Nopp34, complete cds. Homo sapiens ribosomal protein L35a (RPL35A), mRNA. Homo sapiens ring finger protein 17 (RNIF17), transcript variant long, mRNA. Homo sapiens similar to RNA binding motif protein, Y chromosome, family 1 member A1 (RNA-binding motif protein 1) (LOC140065), mRNA.
NM_006276 NM_005008 NM_003138 XM_092386 XM_062047 NM_000991 NM_001537 AB025254 NM_006696 NM_030941 NM_016132 NM_004640	SFRS7 NHP2L1 SRPK2 LOC165115 LOC120470 RPL28 HSBP1 BAA76379 BRD8 LOC281691 MYEF2 BAT1	NP_006267 NP_004999 NP_003129 XP_092386 XP_062047 NP_000982 NP_001528 NP_001528 NP_006687 NP_112203 NP_057216 NP_004631	Homo sapiens splicing factor, arginine/serine-rich 7, 35kDa (SFRS7), mRNA. Homo sapiens NHP2 non-histone chromosome protein 2-like 1 (S. cerevisiae) (NHP2L1), mRNA. Homo sapiens SRPK2 protein kinase 2 (SRPK2), mRNA. Homo sapiens similar to KIAA1841 protein (LOC165115), mRNA. Homo sapiens similar to discs, large (Drosophila) homolog 2; chapsyn-110 (LOC120470), mRNA. Homo sapiens ribosomal protein L28 (RPL28), mRNA. Homo sapiens heat shock factor binding protein 1 (HSBP1), mRNA. Homo sapiens mRNA for Tudor repeat associator with PCTAIRE 2, partial cds. Homo sapiens bromodomain containing 8 (BRD8), transcript variant 1, mRNA. Homo sapiens exonuclease NEF-sp (LOC281691), mRNA. Homo sapiens myelin expression factor 2 (MYEF2), mRNA. Homo sapiens HLA-B associated transcript 1 (BAT1), transcript variant 1, mRNA.

Protein Product	GeneBank Accession Number or Manufacturer	Gene Name or Manufacturer Probe Name	Manufacture Probe Name	Sequence Reference	Description
	NM_012345 XM_092031	NUFIP1 LOC163147		NP_036477 XP_092031	Homo sapiens nuclear fragile X mental retardation protein interacting protein 1 (NUFIP1), mRNA. Homo sapiens similar to Splicing factor 3A subunit 2 (Spliceosome associated protein 62) (SAP62) (SF3a66) (LOC163147), mRNA.
XM_067074		LOC140100	GARS	XP_067074 NP_002038	Homo sapiens similar to RBM1 (LOC140100), mRNA. Homo sapiens glycyl-tRNA synthetase (GARS), mRNA.
NM_002047		RPS13	HSF2	NP_001008 NP_004497	Homo sapiens ribosomal protein S13 (RPS13), mRNA. Homo sapiens heat shock transcription factor 2 (HSF2), mRNA.
NM_001017		SF3B3	TDRD4	NP_036558 NP_061911	Homo sapiens splicing factor 3b, subunit 3, 130kDa (SF3B3), mRNA. Homo sapiens tudor domain containing 4 (TDRD4), mRNA.
NM_004506		ADAR	AAF31271	NP_001111 NP_001102	Homo sapiens chromosome 19, BC335474 (CIT-HSPC_482H14), complete sequence. Homo sapiens adenosine deaminase, RNA-specific (ADAR), transcript variant ADAR-a, mRNA.
NM_012426		LOC126635	FLJ20399	XP_060102 NP_060273	Homo sapiens LOC126635 (LOC126635), mRNA. Homo sapiens hypothetical protein FLJ20399 (FLJ20399), mRNA.
NM_019038		LOC151173	SCYE1	NP_011524 NP_004748	Homo sapiens similar to TAR DNA-binding protein 43 (TDP-43) (LOC151173), mRNA. Homo sapiens small inducible cytokine subfamily E, member 1 (endothelial monocyte-activating) (SCYE1), mRNA.
AC004957		DIX38	LOC150152	NP_054722 XP_086792	Homo sapiens DEAH (Asp-Glu-Ala-His) box polypeptide 38 (DIX38), mRNA. Homo sapiens similar to SPlicing FACTOR U2AF 35 KD SUBUNIT (U2 AUXILIARY FACTOR 35 KD SUBUNIT) (U11)
NM_014003 XM_086792					Homo sapiens PAC clone RP5-1093Q17 from 7, complete sequence.
NM_007007		CPSF6		NP_008938	Homo sapiens cleavage and polyadenylation specific factor 6, 68kDa (CPSF6), mRNA.
NM_019037		EXOSC4	LOC137786	NP_061910 XP_070605	Homo sapiens exosome component 4 (EXOSC4), mRNA. Homo sapiens similar to ANTIGEN GOR (LOC137786), mRNA.
XM_070605		FLJ20274	HSU84971	NP_060206 NP_060516	Homo sapiens hypothetical protein FLJ20274 (FLJ20274), mRNA. Homo sapiens vasculogenesis gene on 5q (HSU84971), mRNA.

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Manufacturer Probe Name	Gene Name or Manufacturer Probe Name	Description
Protein Product GenBank Accession Number or Manufacturer Sequence ID	Reference	Reference	Reference
NM_006842	SF3B2	NP_006833	Homo sapiens splicing factor 3b, subunit 2, 145kD (SF3B2), mRNA.
NM_021033	RAP2A	NP_066361	Homo sapiens RAP2A, member of RAS oncogene family (RAP2A), mRNA.
XM_095899	LOC169732	XP_095899	Homo sapiens similar to EXOSOME COMPLEX EXONUCLEASE RRP4 (RIBOSOMAL RNA PROCESSING PROTEIN 4)
NM_031274	TEX13A	NP_112564	Homo sapiens testis expressed sequence 13A (TEX13A), mRNA.
NM_006387	CHERP	NP_006378	Homo sapiens calcium homeostasis endoplasmic reticulum protein (CHERP), mRNA.
NM_000964	RARA	NP_000955	Homo sapiens retinoic acid receptor, alpha (RARA), mRNA.
XM_066446	LOC139051	XP_066446	Homo sapiens similar to pol protein (LOC139051), mRNA.
NM_003072	SMARCA4	NP_003063	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4 (SMARCA4), mRNA.
NM_022767	FLJ12484	NP_073604	Homo sapiens hypothetical protein FLJ12484 (FLJ12484), mRNA.
NM_001112	ADARB1	NP_001103	Homo sapiens adenosine deaminase, RNA-specific, B1 (RED1 homolog rat) (ADARB1), transcript variant DRADA2a, mRNA.
NM_017774	CDKL1	NP_060244	Homo sapiens CDK5 regulatory subunit associated protein 1-like 1 (CDKL1), mRNA.
NM_013302	EEF2K	NP_037434	Homo sapiens elongation factor-2 kinase (EEF2K), mRNA.
NM_018702	ADARB2	NP_061172	Homo sapiens adenosine deaminase, RNA-specific, B2 (RED2 homolog rat) (ADARB2), mRNA.
XM_099765	LOC143344	XP_089765	Homo sapiens similar to poly(A) binding protein (LOC143344), mRNA.
AF026564	RBMII	AAC16916	Homo sapiens RNA binding protein II (RBMII) gene, complete cds.
NM_016333	SRRM2	NP_057417	Homo sapiens serine/arginine repetitive matrix 2 (SRRM2), mRNA.
NM_004039	ANXA2	NP_004030	Homo sapiens annexin A2 (ANXA2), mRNA.
NM_006187	OAS3	NP_006178	Homo sapiens 2'-5'-oligoadenylate synthetase 3, 100kDa (OAS3), mRNA.
XM_089587	LOC159428	XP_089587	Homo sapiens similar to EUKARYOTIC TRANSLATION INITIATION FACTOR 4B (EIF-4B) (LOC159428), mRNA.
AB061839	RPS9	BAB79477	Homo sapiens RPS9 gene for ribosomal protein S9, complete cds and sequence.
NM_018060	FLJ10326	NP_080530	Homo sapiens mitochondrial isoleucine tRNA synthetase (FLJ10326), mRNA.

Protein Product GeneBank Accession Number or Manufacturer Sequence ID	Manufacturer Probe Name	Reference	Description
NM_003787	NOL4	NP_003778	Homo sapiens nucleolar protein 4 (NOL4), mRNA.
NM_003086	SNAPC4	NP_003077	Homo sapiens small nuclear RNA activating complex, polypeptide 4, 190kDa (SNAPC4), mRNA.
NM_004728	DDX21	NP_004719	Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 21 (DDX21), mRNA.
XM_092043	LOC163160	XP_092043	Homo sapiens similar to pyopyrimidine tract binding protein, isoform b; heterogeneous nuclear ribonucleoprotein polyepitpic i; RNA binding protein (LOC163160), mRNA.
NM_014829	DDX46	NP_055644	Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 46 (DDX46), mRNA.
NM_004597	SNRPD2	NP_004588	Homo sapiens small nuclear ribonucleoprotein D2 polypeptide 16.5kDa (SNRPD2), transcript variant 1, mRNA.
NM_004774	PPARBP	NP_004765	Homo sapiens PPAR binding protein (PPARBP), mRNA.
NM_002515	NOVA1	NP_002506	Homo sapiens neuro-oncological ventral antigen 1 (NOVA1), transcript variant 1, mRNA.
NM_006410	HTATIP2	NP_006401	Homo sapiens HIV-1 Tat interactive protein 2, 30kDa (HTATIP2), mRNA.
NM_005687	FARS1B	NP_005678	Homo sapiens phenylalanine-tRNA synthetase-like, beta subunit (FARS1B), mRNA.
NM_001644	APOBEC1	NP_001635	Homo sapiens apolipoprotein B mRNA editing enzyme, catalytic polypeptide 1 (APOBEC1), transcript variant 1, mRNA.
NM_033246	PML	NP_150249	Homo sapiens promyelocytic leukemia (PML), transcript variant 7, mRNA.
XM_091270	LOC161983	XP_091270	Homo sapiens similar to Heterogeneous nuclear ribonucleoprotein A1 (Helix destabilizing protein) (Single-strand binding protein) (hnRNP core protein A1) (HDP-1) (Topoisomerase inhibitor suppressed) (LOC161983), mRNA.
NM_015409	EP400	NP_056224	Homo sapiens E1A binding protein p400 (EP400), mRNA.
NM_015453	DKFZP434F091	NP_056268	Homo sapiens DKFZP434F091 protein (DKFZP434F091), mRNA.
XM_067072	LOC140098	XP_067072	Homo sapiens similar to RBM1 (LOC140098), mRNA.
XM_056568	LOC147774	XP_056568	Homo sapiens similar to KH-type splicing regulatory protein (FUSE binding protein 2) (H. sapiens) (LOC147774), mRNA.
NM_022078	FLJ12455	NP_071361	Homo sapiens hypothetical protein FLJ12455 (FLJ12455), mRNA.
NM_001364	DLG2	NP_001355	Homo sapiens discs, large homolog 2, dapsyn-110 (Drosophila) (DLG2), mRNA.

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Manufacturer Probe Name	Gene Name or Manufacturer Probe Name	Protein Product	Description
Accession Number or Manufacturer Sequence ID	Manufacturer Probe Name	Gene Name or Manufacturer Probe Name	GeneBank Accession Number or Manufacturer Sequence Reference	GeneBank Accession Number or Manufacturer Sequence Reference
NM_003752 XM_091235	EIF3S8 LOC161931	ACINUS THR8	NP_003743 XP_091235	Homo sapiens eukaryotic translation initiation factor 3, subunit 8, 110kDa (EIF3S8), mRNA. Homo sapiens similar to testis nuclear RNA binding protein (LOC161931), mRNA.
NM_014977 NM_00461			NP_055792 NP_000452	Homo sapiens apoptosis chromatin condensation inducer in the nucleus (ACINUS), mRNA. Homo sapiens thyroid hormone receptor, beta (erythroid-leukemia viral v-erb-a oncogene homolog 2, avian) (THR8), mRNA.
NM_024939 NM_032572 AF315592 NM_004433 XM_058943 NM_006624 NM_016166 NM_006663 XM_058876 NM_000057 NM_004461 NM_006163 AE066640 NM_017846 XM_058975	FLJ21918 RNASE7 PUMH1 ELF3 LOC125925 B369 PIAS1 RAI MGC49942 BLM FARS1A NFE2 NDUFB10 SECP43 LOC148683		NP_079215 NP_115961 AAG31807 NP_004424 XP_058943 NP_006615 NP_057250 NP_006654 XP_058876 NP_000048 NP_004452 NP_006154 AAK61302 NP_060316 XP_0588975	Homo sapiens hypothetical protein FLJ21918 (FLJ21918), mRNA. Homo sapiens ribonuclease, RNase A family, 7 (RNASE7), mRNA. Homo sapiens Pumilio 1 (PUMH1) mRNA, complete cds. Homo sapiens E74-like factor 3 (ets domain transcription factor, epithelial-specific) (ELF3), mRNA. Homo sapiens similar to R32611_1 (LOC125925), mRNA. Homo sapiens adenovirus 5 E1A binding protein (B369), mRNA. Homo sapiens PIAS1 protein inhibitor of activated STAT, 1 (PIAS1), mRNA. Homo sapiens RelA-associated inhibitor (RAI), mRNA. Homo sapiens hypothetical protein MGC49942 (MGC49942), mRNA. Homo sapiens Bloom syndrome (BLM), mRNA. Homo sapiens phenylalanine-tRNA synthetase-like, alpha subunit (FARS1A), mRNA. Homo sapiens nuclear factor (erythroid-derived 2), 45kDa (NFE2), mRNA. Homo sapiens 16p13.3 sequence section B of 8. Homo sapiens selenocysteine associated protein (SECP43), mRNA. Homo sapiens similar to pumilio homolog 1 (Drosophila), pumilio (Drosophila) homolog 1 (LOC148683), mRNA.
NM_012321 NM_012143 NM_001111	LSM4 TFIP11 ADAR		NP_036453 NP_036275 NP_001102	Homo sapiens LSM4 homolog, U6 small nuclear RNA associated (<i>S. cerevisiae</i>) (LSM4), mRNA. Homo sapiens ttf1olin interacting protein 11 (TFIP11), mRNA. Homo sapiens adenosine deaminase, RNA-specific (ADAR), transcript variant ADAR-a, mRNA.

Protein Product	GeneBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacture Probe Name	Description
GeneBank Accession Number or Manufacturer Sequence ID	Manufacturer	Reference	Sequence
NM_001535		HMT1L1	NP_001526 Homo sapiens HMT1 hnRNP methyltransferase-like 1 (<i>S. cerevisiae</i>) (HMT1L1), mRNA.
NM_016173	HEMK		NP_057237 Homo sapiens HEMK homolog 7kb (HEMK), mRNA.
NM_005754	G3BP		NP_005745 Homo sapiens Ras-GTPase-activating protein SH3-domain-binding protein (G3BP), transcript variant 1, mRNA.
NM_002892	ARID4A	NP_002883 Homo sapiens AT rich interactive domain 4A (RBP1-like) (ARID4A), transcript variant 1, mRNA.	
XM_092221	LOC64891	XP_092221 Homo sapiens similar to mRNA for ribosomal protein S9 (LOC164891), mRNA.	
NM_001412	EIF1A	NP_001403 Homo sapiens eukaryotic translation initiation factor 1A (EIF1A), mRNA.	
XM_095591	LOC169242	XP_095591 Homo sapiens similar to data source:SPTB, source key:084865, evidence:ISS-homolog to KIAA0765 PROTEIN (HRHFB2091 PROTEIN)~putative (LOC169242), mRNA.	
NM_033004	NALP1	NP_127497 Homo sapiens NACHT, leucine rich repeat and PYD containing 1 (NALP1), transcript variant 1, mRNA.	
XM_093336	LOC165631	XP_093336 Homo sapiens similar to Eukaryotic translation initiation factor 4B (eIF-4B) (LOC165631), mRNA.	
NM_012255	XRN2	NP_0963387 Homo sapiens 5'-3' exoribonuclease 2 (XRN2), mRNA.	
XM_085002	LOC126246	XP_085002 Homo sapiens LOC126246 (LOC126246), mRNA.	
NM_001618	ADPRT	NP_001609 Homo sapiens ADP-ribosyltransferase (NAD ⁺ , poly (ADP-ribose) polymerase) (ADPRT), mRNA.	
XM_067452	LOC131596	XP_067452 Homo sapiens similar to splicing factor 3a, subunit 2, 66kD, Spliceosome protein SAP-62 (LOC131596), mRNA.	
XM_062601	LOC121365	XP_062601 Homo sapiens similar to RBM1 (LOC121365), mRNA.	
HUMAUU		AA859352 Homo sapiens (clone JH4B1) PM-sci autoantigen mRNA, complete cds.	
NM_001686	ATP5B	NP_001677 Homo sapiens ATP synthase, H ⁺ transporting, mitochondrial F1 complex, beta polypeptide (ATP5B), mRNA.	
NM_007294	BRCA1	NP_009225 Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1a, mRNA.	
NM_002502	NFKB2	NP_002493 Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100) (NFKB2), mRNA.	
XM_068248	LOC133225	XP_068248 Homo sapiens similar to heterogeneous ribonuclear particle protein A1,beta - human (LOC133225), mRNA.	
NM_021724	NRID1	NP_068370 Homo sapiens nuclear receptor subfamily 1, group D, member 1 (NR1D1), mRNA.	
NM_016374	ARID4B	NP_057458 Homo sapiens AT rich interactive domain 4B (RBP1-like) (ARID4B), transcript variant 1, mRNA.	

Nucleotide GenBank Accession	Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Manufacturer Probe Name	Reference	Description
XM_068022	LOC132772	KARS	XP_068022	Homo sapiens similar to split ends, polycephalon, yippee interacting protein 1 (LOC132772), mRNA.	
NM_005548		NCOR1	NP_005539	Homo sapiens lysyl-tRNA synthetase (KARS), mRNA.	
NM_006311		PS1D	NP_006302	Homo sapiens nuclear receptor co-repressor 1 (NCOR1), mRNA.	
NM_016505		SFRS2IP	NP_057589	Homo sapiens putative S1 RNA binding domain protein (PS1D), mRNA.	
NM_004719		EXO1	NP_004710	Homo sapiens splicing factor, arginine/serine-rich 2, interacting protein (SFRS2IP), mRNA.	
NM_003686		THRAP5	NP_003677	Homo sapiens exonuclease 1 (EXO1), transcript variant 3, mRNA.	
NM_005481		LBR	NP_005472	Homo sapiens thyroid hormone receptor associated protein 5 (THRAP5), mRNA.	
NM_002296		DHX30	NP_002287	Homo sapiens lamin B receptor (LBR), transcript variant 1, mRNA.	
JM_014966		HNRPD	NP_055781	Homo sapiens DEAH (Asp-Glu-Ala-His) box polypeptide 30 (DHX30), transcript variant 2, mRNA.	
AF026126		LOC139801	AAC23476	Homo sapiens heterogeneous nuclear ribonucleoprotein D (HNRPD) gene, complete cds.	
XM_066901		AK057303	XP_066901	Homo sapiens LOC139801 (LOC139801), mRNA.	
			BAB71416	Homo sapiens cDNA FLJ32741 fs, clone TESTI2001345, highly similar to <i>M.musculus</i> Testr mRNA for RNA binding protein	
XM_067087	LOC10123		XP_067087	Homo sapiens similar to RNA binding motif protein, Y chromosome, family 2 member B (LOC10123), mRNA.	
NM_033502	TRERF1		NP_277037	Homo sapiens transcriptional regulating factor 1 (TRERF1), transcript variant 1, mRNA.	
NM_005822	DSCR1L1		NP_058113	Homo sapiens Down syndrome critical region gene 1-like 1 (DSCR1L1), mRNA.	
NM_002897	RBM51		NP_028888	Homo sapiens RNA binding motif, single stranded interacting protein 1 (RBM51), transcript variant sc2, mRNA.	
XM_067844	LOC132430		XP_067844	Homo sapiens similar to Polyadenylate-binding protein 4 (Poly(A)-binding protein 4) (PABP 4) (Inducible poly(A)-binding protein) (PABP) (Activated platelet protein-1) (APP-1) (LOC132430), mRNA.	
NM_002949	MRPL12		NP_002940	Homo sapiens mitochondrial ribosomal protein L12 (MRPL12), nuclear gene encoding mitochondrial protein, mRNA.	
NM_003219	TERT		NP_003210	Homo sapiens telomerase reverse transcriptase (TERT), transcript variant 1, mRNA.	
XM_070624	LOC137819		XP_070624	Homo sapiens LOC137819 (LOC137819), mRNA.	

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Manufacturer Reference	Description
NM_002937	RNASE4	NP_002928	Homo sapiens ribonuclease, RNase A family, 4 (RNASE4); transcript variant 2, mRNA.
NM_008546	IMP-1	NP_008537	Homo sapiens IGF-II mRNA-binding protein 1 (IMP-1), mRNA.
NM_004860	FXR2	NP_00851	Homo sapiens fragile X mental retardation, autosomal homolog 2 (FXR2), mRNA.
NM_003321	TUFM	NP_003312	Homo sapiens Tu translation elongation factor, mitochondrial (TUFM), mRNA.
NM_005893	NRH3	NP_005884	Homo sapiens nuclear receptor subfamily 1, group H, member 3 (NRH3), mRNA.
NM_006365	CTCF	NP_006556	Homo sapiens CCCTC-binding factor (zinc finger protein) (CTCF), mRNA.
NM_018864	SNFT	NP_061134	Homo sapiens Jun dimerization protein p21SNFT (SNFT), mRNA.
M_000338	POLR2B	NP_000929	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide B, 140kDa (POLR2B), mRNA.
M_002934	RNASE2	NP_002925	Homo sapiens ribonuclease, RNase A family, 2 (liver, eosinophil-derived neurotoxin) (RNASE2), mRNA.
M_006980	MTERF	NP_008911	Homo sapiens transcription termination factor, mitochondrial (MTERF), nuclear gene encoding mitochondrial protein, mRNA.

Nucleotide Sequence Description				
GenBank Accession for mRNA	Gene Symbol	GenBank Accession for Protein	Description	
NM_012070 NM_003488	AKAP1	ATRN NP_036202 NP_003479	Homo sapiens attractin (ATRN), transcript variant 3, mRNA. Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), nuclear gene encoding mitochondrial protein, transcript variant 1, mRNA.	
XM_044795 XM_089332	LOC92392 LOC149388 2	XP_044795 XP_089332	Homo sapiens similar to colon cancer antigen NY-CO-45 (LOC92392), mRNA. Homo sapiens similar to ribosomal protein L22 proprotein; 60S ribosomal protein L22; Epstein-Barr-encoded RNA-associated protein; Epstein-Barr virus small RNA-associated protein; EBER-associated protein; heparin-binding protein 15; heparin-binding protein HBp15... (LOC149382), mRNA.	
NM_001024 NM_001324 NM_006625 NM_006540 NM_005782 NM_032102 NM_014497 ..._022915	RPS21 CSTF1 FUSIP1 NCOA2 THOC4 SRP46 NP220 MRPL44	NP_001015 NP_001315 NP_006616 NP_006531 NP_005773 NP_115285 NP_053312 NP_075066	Homo sapiens cleavage stimulation factor, 3' pre-RNA, subunit 1, 50kDa (CSTF1), mRNA. Homo sapiens FUS interacting protein (serine-arginine rich) 1 (FUSIP1), transcript variant 1, mRNA. Homo sapiens nuclear receptor coactivator 2 (NCOA2), mRNA. Homo sapiens THO complex 4 (THOC4), mRNA. Homo sapiens Splicing factor, arginine/serine-rich, 46kD (SRP46), mRNA. Homo sapiens NP220 nuclear protein (NP220), mRNA. Homo sapiens mitochondrial ribosomal protein L44 (MRPL44), nuclear gene encoding mitochondrial protein, mRNA.	
_003325 _006397	HIRA RNASEH2 A	NP_003316 NP_006388	Homo sapiens HIR histone cell cycle regulation defective homolog A (<i>S. cerevisiae</i>) (HIRA), mRNA. Homo sapiens ribonuclease H2, large subunit (RNASEH2A), mRNA.	
_006548 _005801 _007157 _000029	IMP-2 SUI1 AGT	NP_006539 NP_005792 AAC19158 NP_000020	Homo sapiens IGF-II mRNA-binding protein 2 (IMP-2), mRNA. Homo sapiens putative translation initiation factor (SUI1), mRNA. Homo sapiens clone 23856 unknown mRNA, partial cds. Homo sapiens angiotseninogen (serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 8) (AGT), mRNA.	
_002904 BC016283	RDBP ABC1	NP_002895 AAH16283	Homo sapiens RD RNA binding protein (RDBP), mRNA. Homo sapiens ATP-binding cassette, sub-family E (OABP); member 1, mRNA (cDNA clone MGC:9023 IMAGE:3909151), complete cds.	
AF049525 NM_014462	HYPc LSM1	AAC27503 NP_055277	Homo sapiens huntingtin-interacting protein HYPc (HYPc) mRNA, partial cds. Homo sapiens LSM1 homolog, U6 small nuclear RNA associated (<i>S. cerevisiae</i>) (LSM1), mRNA.	

Figure 15

Gene Symbol	GenBank Accession for mRNA	GenBank Accession for Protein	Nucleotide Sequence Description
KIAA0664	BAA31639	Homo sapiens mRNA for KIAA0664 protein, partial cds.	
NM_001253	NP_001244	Homo sapiens CDC5L cell division cycle 5-like (S. pombe) (CDC5L), mRNA.	
NM_001991	NP_001982	Homo sapiens enhancer of zeste homolog 1 (Drosophila) (EZH1), mRNA.	
NM_001090	NP_001081	Homo sapiens ATP-binding cassette, sub-family F (GCN20), member 1 (ABCF1), mRNA.	
NM_000061	NP_000052	Homo sapiens Bruton agammaglobulinemia tyrosine kinase (BTK), mRNA.	
AB020657	BAA74873	Homo sapiens mRNA for KIAA0850 protein, partial cds.	
NM_032390	NP_115766	Homo sapiens MKI67 (FHA domain) interacting nucleolar phosphoprotein (MKI67IP), mRNA.	
NM_030980	FLJ12671	NP_112242 Homo sapiens hypothetical protein FLJ12671 (FLJ12671), mRNA.	
I_017827	SARS2	NP_060297 Homo sapiens seryl-tRNA synthetase 2 (SARS2), mRNA.	
I_068948	LOC139891	XP_066948 Homo sapiens similar to hypothetical protein BC011593 (LOC139891), mRNA.	
I_091974	LOC147891	XP_091974 Homo sapiens similar to hypothetical protein DKFZp434I1930 (H. sapiens) (LOC147891), mRNA.	
I_014060	MCTS1	NP_054779 Homo sapiens malignant T cell amplified sequence 1 (MCTS1), mRNA.	
I_000647	CCR2	NP_000638 Homo sapiens chemokine (C-C motif) receptor 2 (CCR2), transcript variant A, mRNA.	
I_001016	RPS12	NP_001007 Homo sapiens ribosomal protein S12 (RPS12), mRNA.	
NM_032359	MGC4308	NP_115735 Homo sapiens hypothetical protein MGC4308 (MGC4308), mRNA.	
NM_017736	FLJ20274	NP_060206 Homo sapiens hypothetical protein FLJ20274 (FLJ20274), mRNA.	
NM_008627	POP4	NP_006618 Homo sapiens processing of precursor 4, ribonuclease P/MRP subunit (<i>S. cerevisiae</i>) (POP4), mRNA.	
BC001050	NFATC3	Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3, transcript variant 1, mRNA (cDNA clone IMAGE:3505967), complete cds.	
NM_000344	SMN1	NP_000335 Homo sapiens survival of motor neuron 1, telomeric (SMN1), transcript variant d, mRNA.	

Fig. 1 (1)

GenBank Accession for mRNA	Gene Symbol	GenBank Accession for Protein	Nucleotide Sequence Description
XM_094140	LOC166863	XP_094140	Homo sapiens similar to Apobec-1 complementation factor, APOBEC-1 stimulating protein (LOC166863), mRNA.
NM_005548	KARS	NP_005539	Homo sapiens lysyl-tRNA synthetase (KARS), mRNA.
NM_007235	XPOT	NP_009166	Homo sapiens exportin, tRNA (nuclear export receptor for tRNAs) (XPOT), mRNA.
AF230402	AAG50181		Homo sapiens tripartite motif protein TRIM19 beta mRNA, complete cds.
NM_003680	YARS	NP_003671	Homo sapiens tyrosyl-tRNA synthetase (YARS), mRNA.
XM_086419	LOC149092	XP_086419	Homo sapiens similar to pumilio homolog 1 (Drosophila) (H. sapiens) (LOC149092), mRNA.
NM_015629	PRPF31	NP_056444	Homo sapiens PRP31 pre-mRNA processing factor 31 homolog (yeast) (PRPF31), mRNA.
XM_067598	LOC131898	XP_067598	Homo sapiens similar to POLYADENYLATE-BINDING PROTEIN 2 (POLY(A) BINDING PROTEIN 2) (PABP 2) (LOC131898), mRNA.
1255	EIF2C2	AAF13034	Homo sapiens protein translation initiation factor 2C2 (EIF2C2), mRNA, partial cds.
086708	LOC149816	XP_086708	Homo sapiens similar to Splicing factor 3A subunit 3 (Spliceosome associated protein 61) (SAP 61) (SF3a60) (LOC149816), mRNA.
007020	U1SNRNPBP	NP_008851	Homo sapiens U1-snRNP binding protein homolog (U1SNRNPBP), transcript variant 1, mRNA.
017453	STAU	NP_059347	Homo sapiens staufen, RNA binding protein (Drosophila) (STAU), transcript variant T3, mRNA.
001698	AUH	NP_001689	Homo sapiens AU RNA binding protein/enoyl-Coenzyme A hydratase (AUH), nuclear gene encoding mitochondrial protein, mRNA.
001714	BICD1	NP_001705	Homo sapiens Bicaudal D homolog 1 (Drosophila) (BICD1), mRNA.
XM_0666904	LOC139804	XP_0666904	Homo sapiens similar to testes-specific heterogenous nuclear ribonucleoprotein G-T (LOC139804), mRNA.
NM_004593	SFRS10	NP_004584	Homo sapiens splicing factor, arginine/serine-rich 10 (transformer 2 homolog, Drosophila) (SFRS10), mRNA.
AL117507	DKFZp434F19	CAB555669	Homo sapiens mRNA; cDNA DKFZp434F1935 (from clone DKFZp434F1935); partial cds.

Gene Symbol

GenBank
Accession
for mRNA

Nucleotide Sequence Description

		GenBank Accession for Protein	Nucleotide Sequence Description
AB020657	KIAA0850	BAA74873	Homo sapiens mRNA for KIAA0850 protein, partial cds.
AB033019	KIAA1193	BAA86507	Homo sapiens mRNA for KIAA1193 protein, partial cds.
AF026564	RBMII	AAC16916	Homo sapiens RNA binding protein II (RBMI) gene, complete cds.
AF165518	MAGOH	AAF866448	Homo sapiens MAGOH isoform (MAGOH) mRNA, complete cds.
AF273304		AAF98162	Homo sapiens XPMC2 protein mRNA, complete cds.
AL117507	DKFZp434F193	CAB55969	Homo sapiens mRNA, cDNA DKFZp434F1935 (from clone DKFZp434F1935); partial cds.
L01457		AAB59352	Homo sapiens (clone JH4B1) PM-scl autoantigen mRNA, complete cds.
NM_000455	STK11	NP_000446	Homo sapiens serine/threonine kinase 11 (Peutz-Jeghers syndrome) (STK11), mRNA.
NM_000982	RPL21	NP_000973	Homo sapiens ribosomal protein L21 (RPL21), mRNA.
NM_000996	RPL35A	NP_000987	Homo sapiens ribosomal protein L35a (RPL35A), mRNA.
NM_000999	RPL38	NP_000990	Homo sapiens ribosomal protein L38 (RPL38), mRNA.
NM_001004	RPLP2	NP_000995	Homo sapiens ribosomal protein, large P2 (RPLP2), mRNA.
NM_001011	RPS7	NP_001002	Homo sapiens ribosomal protein S7 (RPS7), mRNA.
001026	RPS24	NP_001017	Homo sapiens ribosomal protein S24 (RPS24), transcript variant 2, mRNA.
001032	RPS29	NP_001023	Homo sapiens ribosomal protein S29 (RPS29), mRNA.
001112	ADARB1	NP_001103	Homo sapiens adenosine deaminase, RNA-specific, B1 (RED1 homolog rat) (ADARB1), transcript variant DRADA2a, mRNA.
001356	DDX3X	NP_001347	Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 3, X-linked (DDX3X), transcript variant 2, mRNA.
001357	DHX9	NP_001348	Homo sapiens DEAH (Asp-Glu-Ala-His) box polypeptide 9 (DHX9), transcript variant 1, mRNA.
001618	ADPRT	NP_001609	Homo sapiens ADP-ribosyltransferase (NAD ⁺ , poly (ADP-ribose) polymerase) (ADPRT), mRNA.
002520	NPM1	NP_002511	Homo sapiens nucleolar phosphoprotein B23, numatrin) (NPM1), mRNA.
002967	SAFB	NP_002958	Homo sapiens scaffold attachment factor B (SAFB), mRNA.
003133	SRP9	NP_003124	Homo sapiens signal recognition particle 9kDa (SRP9), mRNA.
NM_003429	ZNF85	NP_003420	Homo sapiens zinc finger protein 85 (ZFP4, HTF1) (ZNF85), mRNA.
NM_003472	DEK	NP_003463	Homo sapiens DEK oncogene (DNA binding) (DEK), mRNA.
NM_003675	PRPF18	NP_003666	Homo sapiens PRPF18 pre-mRNA processing factor 18 homolog (yeast) (PRPF18), mRNA.
NM_003895	SYNJ1	NP_003886	Homo sapiens synaptojanin 1 (SYNJ1), transcript variant 1, mRNA.
NM_004169	SHMT1	NP_004160	Homo sapiens serine hydroxymethyltransferase 1 (soluble) (SHMT1), transcript variant 1, mRNA.
NM_004239	NFE2L3	NP_004280	Homo sapiens nuclear factor (erythroid-derived 2-like 3 (NFE2L3), mRNA.
NM_004396	DDX5	NP_004387	Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 5 (DDX5), mRNA.
NM_004990	MARS	NP_004981	Homo sapiens methionine-tRNA synthetase (MARS), mRNA.
NM_005083	U2AF1L1	NP_005074	Homo sapiens U2(RNU2) small nuclear RNA auxiliary factor 1-like 1 (U2AF1L1), mRNA.
NM_005548	KARS	NP_005539	Homo sapiens lysyl-tRNA synthetase (KARS), mRNA.
NM_006624	BS69	NP_006615	Homo sapiens adenovirus 5 E1 binding protein (BS69), mRNA.

Figure 17 (1)

Nucleotide Sequence Description			
Gene Symbol	GenBank Accession for mRNA	GenBank Accession for Protein	
NM_007020	U1SNRNPBP	NP_008951	Homo sapiens U1-snRNP binding protein homolog (U1SNRNPBP), transcript variant 1, mRNA.
NM_007080	LSM6	NP_009011	Homo sapiens LSM6 homolog, U6 small nuclear RNA associated (<i>S. cerevisiae</i>) (LSM6), mRNA.
NM_007362	NCBP2	NP_031388	Homo sapiens nuclear cap binding protein subunit 2, 20kDa (NCBP2), mRNA.
NM_012255	XRN2	NP_036387	Homo sapiens 5'-3' exoribonuclease 2 (XRN2), mRNA.
NM_012423	RPL13A	NP_036555	Homo sapiens ribosomal protein L13a (RPL13A), mRNA.
NM_014977	ACINUS	NP_055792	Homo sapiens apoptotic chromatin condensation inducer in the nucleus (ACINUS), mRNA.
NM_015934	NOP5/NOP58	NP_057018	Homo sapiens nucleolar protein NOP5/NOP58 (NOP5/NOP58), mRNA.
NM_016480	PAIP2	NP_057564	Homo sapiens poly(A) binding protein interacting protein 2 (PAIP2), mRNA.
NM_017840	MIRPL16	NP_060310	Homo sapiens mitochondrial ribosomal protein L16 (MRPL16), nuclear gene encoding mitochondrial protein, mRNA.
NM_018281	FLJ10948	NP_060751	Homo sapiens hypothetical protein FLJ10948 (FLJ10948), mRNA.
NM_018427	RRN3	NP_060897	Homo sapiens RNA polymerase I transcription factor RRN3 (RRN3), mRNA.
NM_018664	SNFT	NP_061134	Homo sapiens Jun dimerization protein p21SNFT (SNFT), mRNA.
NM_021104	RPL41	NP_066927	Homo sapiens ribosomal protein L41 (RPL41), mRNA.
_022551	RPS18	NP_072045	Homo sapiens ribosomal protein S18 (RPS18), mRNA.
_031210	DC50	NP_112487	Homo sapiens hypothetical protein DC50 (DC50), mRNA.
_001524	LOC151173	XP_001524	Homo sapiens similar to T4R DNA-binding protein 43 (TDP-43) (LOC151173), mRNA.
_016729	LOC157679	XP_016729	Homo sapiens similar to nuclear receptor coactivator 6 interacting protein (H. sapiens) (LOC157679), mRNA.
_031058	LOC147647	XP_031058	Homo sapiens similar to nucleolar protein interacting with the FHA domain of pK1-67 (H. sapiens) (LOC147647), mRNA.
_047920	LOC92906	XP_047920	Homo sapiens similar to Unknown (protein for IMAGE:3587716) (LOC92906), mRNA.
_058430	LOC119880	XP_058430	Homo sapiens similar to hypothetical protein similar to RNA-binding protein lark (LOC119880), mRNA.
058943	LOC125925	XP_058943	Homo sapiens similar to R3261_1 (LOC125925), mRNA.
XM_059194	LOC127933	XP_059194	Homo sapiens hypothetical protein BC014917 (LOC127933), mRNA.
XM_059936	LOC138046	XP_059936	Homo sapiens similar to RNA-binding protein Raly (LOC138046), mRNA.
XM_060808	LOC128072	XP_060808	Homo sapiens similar to Vigilin (High density lipoprotein-binding protein) (HDL-binding protein) (LOC128072), mRNA.
XM_067452	LOC131596	XP_067452	Homo sapiens similar to splicing factor 3a, subunit 2, 66kD; Spliceosome protein SAP-62 (LOC131596), mRNA.
XM_068248	LOC133225	XP_068248	Homo sapiens similar to heterogeneous ribonuclear particle protein A1.beta - human (LOC133225), mRNA.
XM_068457	LOC133655	XP_068457	Homo sapiens similar to splicing coactivator subunit SRm300; RNA binding protein; AT-rich element binding factor, serine/arginine repetitive matrix 2 (LOC133655), mRNA.
XM_088640	LOC158685	XP_088640	Homo sapiens similar to bA353C18.3.2 (splicing factor CC1.3, isoform 2 (CC1.4)) (LOC158685), mRNA.

Figure 17 (2)

GenBank Accession for mRNA	Gene Symbol	GenBank Accession for Protein	Nucleotide Sequence Description
XM_093336 NM_000971	LOC165631 RPL7	XP_093336 NP_000962	mRNA. Homo sapiens similar to Eukaryotic translation initiation factor 4B (eIF-4B) (LOC165631), mRNA. Homo sapiens ribosomal protein L7 (RPL7), mRNA.

Figure 17(3)

Gene Symbol	GenBank Accession for mRNA	GenBank Accession for Protein	Nucleotide Sequence Description
XM_091042	LOC16168	XP_091042	Homo sapiens similar to data source; MGD, source key:MG1:107795, evidence:ISS-heterogeneous nuclear ribonucleaseprotein C-putative (LOC161682), mRNA.
XM_088433	LOC13361	XP_068433	Homo sapiens similar to Putative RNA-binding protein 15 (RNA binding motif protein 15) (One-Twenty two protein) (LOC133616), mRNA.
XM_093259	LOC17033	XP_093259	Homo sapiens similar to RBM1 (LOC170330), mRNA.
XM_085059	LOC14522	XP_085059	Homo sapiens similar to Splicing factor 3B subunit 4 (Spliceosome associated protein 49) (SAP 49) (SF3b50) (Pre-mRNA splicing factor SF3b 49 kDa subunit) (LOC145223), mRNA.
AF121255	EIF2C2	AAF13034	Homo sapiens protein translation initiation factor 2C2 (EIF2C2) mRNA, partial cds.
NM_005664	MKRN3	NP_005655	Homo sapiens makorin, ring finger protein, 3 (MKRN3), mRNA.
NM_001357	DHX9	NP_001348	Homo sapiens DEAH (Asp-Glu-Ala-His) box polypeptide 9 (DHX9), transcript variant 1, mRNA.
NM_030941	LOC81691	NP_112203	Homo sapiens exonuclease NEF-sp (LOC81691), mRNA.
NM_014852	KIAA0682	NP_055667	Homo sapiens KIAA0682 gene product (KIAA0682), mRNA.
NM_000246	MHC2TA	NP_000237	Homo sapiens MHC class II transactivator (MHC2TA), mRNA.
JM_007165	SF3A2	NP_009096	Homo sapiens splicing factor 3a, subunit 2, 66kDa (SF3A2), mRNA.
IM_005384	NFIL3	NP_005375	Homo sapiens nuclear factor, Interleukin 3 regulated (NFIL3), mRNA.
JM_018427	RRN3	NP_060897	Homo sapiens RNA polymerase I transcription factor RRN3 (RRN3), mRNA.
NM_06212	LOC12686	XP_060212	Homo sapiens similar to tudor repeat associator with PCTAIRE 2 (LOC126861), mRNA.
IM_004895	CIAS1	NP_004886	Homo sapiens cold autoinflammatory syndrome 1 (CIAS1), transcript variant 1, mRNA.
IM_003750	EIF3S10	NP_003741	Homo sapiens eukaryotic translation initiation factor 3, subunit 10 theta, 150/170kDa (EIF3S10), mRNA.
(NM_092386	LOC16511	XP_092386	Homo sapiens similar to KIAA1841 protein (LOC165115), mRNA.
JM_007294	BRCA1	NP_009225	Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1a, mRNA.
NM_001991	EZH1	NP_001982	Homo sapiens enhancer of zeste homolog 1 (Drosophila) (EZH1), mRNA.
XM_010852	LOC15124	XP_010852	Homo sapiens similar to helix-destabilizing protein - rat (LOC151249), mRNA.
NM_002502	NFKB2	NP_002493	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100) (NFKB2), mRNA.
NM_000946	PRIM1	NP_000937	Homo sapiens primase, polypeptide 1, 49kDa (PRIM1), mRNA.
NM_006893	LGTN	NP_008824	Homo sapiens ligatin (LGTN), mRNA.
XM_094140	LOC16686	XP_094140	Homo sapiens similar to Apobec-1 complementation factor, APOBEC-1 stimulating protein (LOC166863), mRNA.
AF083441	3	AAD52028	Homo sapiens Suj1 isolog mRNA, complete cds.
XM_068457	LOC13365	XP_068457	Homo sapiens similar to splicing coactivator subunit SRm300; RNA binding protein; AT-rich element binding factor; serine/arginine repetitive matrix 2 (LOC133655), mRNA.

Figure 18 (1)

Nucleotide Sequence Description

GenBank Accession for mRNA	Gene Symbol	GenBank Accession for Protein	Gene Description
NM_000125	ESR1	NP_000116	Homo sapiens estrogen receptor 1 (ESR1), mRNA.
NM_015971	MRPS7	NP_057055	Homo sapiens mitochondrial ribosomal protein S7 (MRPS7), nuclear gene encoding mitochondrial protein, mRNA.
NM_032514	MAP1LC3A	NP_115903	Homo sapiens microtubule-associated protein 1 light chain 3 alpha (MAP1LC3A), transcript variant 1, mRNA.
NM_004504	HRB	NP_004495	Homo sapiens HIV-1 Rev binding protein (HRB), mRNA.
NM_001029	RPS26	NP_001020	Homo sapiens ribosomal protein S26 (RPS26), mRNA.
NM_002535	OAS2	NP_002526	Homo sapiens 2'-5'-oligoadenylate synthetase 2, 69/71kDa (OAS2), transcript variant 2, mRNA.
NM_003325	HIRA	NP_003316	Homo sapiens HIR histone cell cycle regulation defective homolog A (S. cerevisiae) (HIRA), mRNA.

Figure 18(2)

Gene Symbol	GenBank Accession for mRNA	GenBank Accession for Protein	Nucleotide Sequence Description
XM_092652	LOC165534 PRKRIR	XP_092652 NP_004696	Homo sapiens LOC165534 (LOC165534), mRNA. Homo sapiens protein-kinase, interferon-inducible double stranded RNA dependent inhibitor, repressor of (P58 repressor) (PRKRIR), mRNA.
NM_004705		NP_001528	Homo sapiens heat shock factor binding protein 1 (HSBP1), mRNA.
NM_001537	HSBP1	XP_070624	Homo sapiens LOC137819 (LOC137819), mRNA.
XM_070624	LOC137819 RNASEH2A	NP_006388	Homo sapiens ribonuclease H2, large subunit (RNASEH2A), mRNA.
NM_006397	RPL13A	NP_036555	Homo sapiens ribosomal protein L13a (RPL13A), mRNA.
NM_012423	LOC145223	XP_085059	Homo sapiens similar to Splicing factor 3B subunit 4 (Spliceosome associated protein 49) (SAP 49) (SF3b50) (Pre-mRNA splicing factor SF3b 49 kDa subunit) (LOC145223), mRNA.
NM_085059		NP_003127	Homo sapiens signal recognition particle 54kDa (SRP54), mRNA.
NM_003136	SRP54	XP_091653	Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HELIX-DESTABILIZING PROTEIN) (SINGLE-STRAND BINDING PROTEIN) (HNRNP CORE PROTEIN A1) (LOC162582), mRNA.
XM_091653	LOC162582	NP_005648	Homo sapiens tumor protein p53 binding protein 1 (TP53BP1), mRNA.
NM_005657	TP53BP1	NP_004482	Homo sapiens glucocorticoid receptor DNA binding factor 1 (GRLF1), transcript variant 2, mRNA.
M_004491	GRLF1	NP_009136	Homo sapiens three prime repair exonuclease 2 (TREX2), transcript variant 1, mRNA.
M_007205	TREX2	NP_008556	Homo sapiens CCCTC-binding factor (zinc finger protein) (CTCF), mRNA.
M_006565	CTCF	NP_009228	Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-delta2-10, mRNA.
\F026563	RBMI	NP_004550	Homo sapiens nuclelease sensitive element binding protein 1 (NSEP1), mRNA.
M_007297	BRCA1	NP_004550	Homo sapiens similar to TAR DNA binding protein (LOC127164), mRNA.
M_004559	NSEP1	XP_060358	Homo sapiens KH-type splicing regulatory protein (FUSE binding protein 2) (KHSPF), mRNA.
M_060358	LOC127164	NP_003676	Homo sapiens major vault protein (MVP), transcript variant 2, mRNA.
M_003685	KHSPF	NP_005106	Homo sapiens RD RNA binding protein (RDBP), mRNA.
M_005115	MVP	NP_002895	Homo sapiens terminal phosphate cyclase-like 1 (TCL1), mRNA.
M_002904	RDBP	NP_005763	H.sapiens mRNA for M phase phosphoprotein 100.
M_005772	RCL1	CAA67120	
X88494	mpp10	NP_055877	Homo sapiens peroxisome proliferative activated receptor, gamma, coactivator-related 1 (PPRC1), mRNA.
NM_015062	PPRC1		
AF083441		AAD52028	Homo sapiens SUI1 isoform mRNA, complete cds.
XM_068457	LOC133655	XP_068457	Homo sapiens similar to splicing coactivator subunit SRm300; RNA binding protein, AT-rich element binding factor, serine/arginine repetitive matrix 2 (LOC133655), mRNA.
AK000256		BAA91036	Homo sapiens cDNA FLJ20249 f1, clone COLF6221.
NM_004599	SREBF2	NP_004590	Homo sapiens sterol regulatory element binding transcription factor 2 (SREBF2), mRNA.
NM_005968	HNRPM	NP_005959	Homo sapiens heterogeneous nuclear ribonucleoprotein M (HNRPM), transcript variant 1, mRNA.
BC000138	HNRPM	AAH00138	Homo sapiens heterogeneous nuclear ribonucleoprotein M, transcript variant 1, mRNA (cDNA clone MGCG5136 IMAGE:29005532), complete cds.

Figure 19 (1)

Nucleotide Sequence Description

GenBank Accession for mRNA	Gene Symbol	GenBank Accession for Protein	Nucleotide Sequence Description
NM_004992 NM_001714 NM_015409 BC007052	MECP2 BICD1 EP400 HNRPC	NP_004983 NP_001705 NP_056224 AAH07052	Homo sapiens methyl CpG binding protein 2 (Rett syndrome) (MECP2), mRNA. Homo sapiens Bicaudal D homolog 1 (Drosophila) (BICD1), mRNA. Homo sapiens E1A binding protein p400 (EP400), mRNA. Homo sapiens heterogeneous nuclear ribonucleoprotein C (C1/C2), mRNA (cDNA clone MGC:12469 IMAGE:36886841), complete cds.
NM_012426 NM_003016 NM_002694	SF3B3 SFRS2 POLR2C	NP_036558 NP_003007 NP_002685	Homo sapiens splicing factor 3b, subunit 3, 130kDa (SF3B3), mRNA. Homo sapiens splicing factor, arginine/serine-rich 2 (SFRS2), mRNA. Homo sapiens polymerase (RNA) II (DNA directed) polypeptide C, 33kDa (POLR2C), transcript variant alpha, mRNA.
NM_002197 AF075000	ACO1 H_YH55C04. 1	NP_002188 AAC28457	Homo sapiens aconitase 1, soluble (ACO1), mRNA. Homo sapiens full length insert cDNA YH95C04.
BC002395	SF3A3	AAH02395	Homo sapiens splicing factor 3a, subunit 3, 60kDa, mRNA (cDNA clone MGC:8445 IMAGE:2821350), complete cds.
VIII_056568	LOC147774	XP_056568	Homo sapiens similar to KH-type splicing regulatory protein (FUSE binding protein 2) (H. sapiens (LOC147774)), mRNA.
004846 -005463 -067844	EIF4EL3 HNRPD1 LOC132430	NP_004837 NP_005454 XP_067844	Homo sapiens eukaryotic translation initiation factor 4E-like 3 (EIF4EL3), mRNA. Homo sapiens heterogeneous nuclear ribonucleoprotein D-like (HNRPD1), transcript variant 1, mRNA. Homo sapiens similar to Polyadenylate-binding protein 4 (Poly(A)-binding protein 4) (PABP 4) (Inducible poly(A)-binding protein) (iPABP) (Activated-platelet protein-1) (APP-1) (LOC132430), mRNA.
006112 -017840	PPIE MRPL16	NP_006103 NP_060310	Homo sapiens peptidylprolyl isomerase E (cyclophilin E) (PPIE), transcript variant 1, mRNA. Homo sapiens mitochondrial ribosomal protein L16 (MRPL16), nuclear gene encoding mitochondrial protein, mRNA.
030621 _004397	DICER1 DDX6 HD	NP_085124 NP_004388 NP_002102	Homo sapiens Dicer1, Dcr-1 homolog (Drosophila) (DICER1), transcript variant 2, mRNA. Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 6 (DDX6), mRNA.
NM_002111 AL021546	SFRS9 TRERF1	CAA16498 NP_277036	Homo sapiens huntingtin (Huntington disease) (HD), mRNA. Human DNA sequence from clone XX-15E1 on chromosome 12, complete sequence.
NM_033501 BC012090		AAH12090	Homo sapiens transcriptional regulating factor 1 (TRERF1), transcript variant 2, mRNA.
NM_006546 XM_068928	IMP-1 LOC134611	NP_006537 XP_068928	Homo sapiens Similar to heterogeneous nuclear ribonucleoprotein A3, clone MGC:20045 IMAGE:4661041, mRNA, complete cds.
NM_016381 NM_017518	TREX1 TREX2	NP_057465 NP_059988	Homo sapiens similar to TAR DNA binding protein (LOC134611), mRNA.
NM_015646 NM_052840	RAP1B BRUNOL6	NP_056461 NP_443072	Homo sapiens three prime repair exonuclease 1 (TREX1), transcript variant 1, mRNA. Homo sapiens three prime repair exonuclease 2 (TREX2), transcript variant 5, mRNA. Homo sapiens RAP1B, member of RAS oncogene family (RAP1B), mRNA. Homo sapiens bruno-like 6, RNA binding protein (Drosophila) (BRUNOL6), mRNA.

Figure 19(2)

Nucleotide Sequence Description					
GenBank Accession for mRNA	Gene Symbol	GenBank Accession for Protein	GenBank Accession for Protein	Nucleotide Sequence Description	
NM_001538 XM_063246 XM_063244	HSF4 LOC122663 LOC122661	NP_001529 XP_063246 XP_063244	NP_001529 XP_063246 XP_063244	Homo sapiens heat shock transcription factor 4 (HSF4), mRNA. Homo sapiens LOC122663 (LOC122663), mRNA. Homo sapiens similar to Nonsecretory ribonuclease precursor (Ribonuclease US) (Eosinophil-derived neurotoxin) (RNase Upl-2) (Ribonuclease 2) (RNase 2) (LOC122661), mRNA.	
AW607076 NM_016816 NM_004175 AB020657 BC000595	OAS1 SNRPD3 KIAA0850 DDX17	NP_058132 NP_004166 BAA74873 AAH00595	NP_058132 NP_004166 BAA74873 AAH00595	Homo sapiens 2'-5'-oligoadenylate synthetase 1, 40/46kDa (OAS1), transcript variant E18, mRNA. Homo sapiens small nuclear ribonucleoprotein D3 polypeptide 18kDa (SNRPD3), mRNA. Homo sapiens mRNA for KIAA0850 protein, partial cds. Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 17, mRNA (cDNA clone MGC:2030 IMAGE:3345982), complete cds.	
XM_094158	LOC152994	XP_094158		Homo sapiens similar to splicing factor 3a, subunit 2, 66kD; Spliceosome protein SAP-62 (LOC152994), mRNA.	
NM_007204 NM_006980	DDX20 MTERF	NP_009135 NP_008911		Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 20 (DDX20), mRNA. Homo sapiens transcription termination factor, mitochondrial (MTERF), nuclear gene encoding mitochondrial protein, mRNA.	
A_006491 A_032102 F035040	NOVA1 SRP46 MAGOH	NP_006482 NP_115285 AAC39606		Homo sapiens neuro-oncological ventral antigen 1 (NOVA1), transcript variant 3, mRNA. Homo sapiens Splicing factor, arginine/serine-rich, 46kD (SRP46), mRNA. Homo sapiens MAGOH mRNA, complete cds.	
A_066948 A_007165 A_014223 A_093219	LOC139891 SF3A2 NFYC LOC170270	XP_066948 NP_009096 NP_055038 XP_093219		Homo sapiens similar to hypothetical protein BC011593 (LOC139891), mRNA. Homo sapiens splicing factor 3a, subunit 2, 66kDa (SF3A2), mRNA. Homo sapiens nuclear transcription factor Y, gamma (NFYC), mRNA. Homo sapiens similar to Heterogeneous nuclear ribonucleoprotein A3 homolog 2 (hnRNP A3(B)) (LOC170270), mRNA.	
A_002137	HNRP A2B1	NP_002128		Homo sapiens heterogeneous nuclear ribonucleoprotein A2/B1 (HNRP A2B1), transcript variant A2, mRNA.	
J25206 NM_014977 XM_094555 XM_065946	TRABID ACINUS LOC167540 LOC130900	CAB64449 NP_055792 XP_094555 XP_065946		Homo sapiens mRNA for TRABID protein (TRABID gene). Homo sapiens apoptotic chromatin condensation inducer in the nucleus (ACINUS), mRNA. Homo sapiens similar to RIKEN cDNA C130020J04 (LOC167540), mRNA. Homo sapiens similar to Heterogeneous nuclear ribonucleoprotein A1 (Helix-destabilizing protein) (Single-strand binding protein) (hnRNP core protein A1) (HDP-1) (Topoisomerase-inhibitor suppressed) (LOC130900), mRNA.	
AF005068	BRCA1	AAB61673		Homo sapiens breast and ovarian cancer susceptibility protein splice variant (BRCA1) mRNA, complete cds.	
NM_012469 NM_004643 NM_003325	C20orf14 PABPN1 HIRA	NP_036601 NP_004634 NP_003316		Homo sapiens chromosome 20 open reading frame 14 (C20orf14), mRNA. Homo sapiens poly(A) binding protein, nuclear 1 (PABPN1), mRNA. Homo sapiens HIR histone cell cycle regulation defective homolog A (<i>S. cerevisiae</i>) (HIRA), mRNA.	

Figure 1a(3)

				Nucleotide Sequence Description
GenBank Accession for mRNA	Gene Symbol	GenBank Accession for Protein		
NM_019038	TDRD4	NP_061911	Homo sapiens tudor domain containing 4 (TDRD4), mRNA.	
NM_025065	RPF1	NP_079341	Homo sapiens RNA processing factor 1 (RPF1), mRNA.	
NM_005877	SF3A1	NP_005868	Homo sapiens splicing factor 3a, subunit 1, 120kDa (SF3A1), mRNA.	
NM_002138	HNRPD	NP_002129	Homo sapiens heterogeneous nuclear ribonucleoprotein D (AU-rich element RNA binding protein 1, 37kDa) (HNRPD), transcript variant 3, mRNA.	
XM_058876	MGC49942	XP_058876	Homo sapiens hypothetical protein MGC49942 (MGC49942), mRNA.	
NM_021976	RXRB	NP_068811	Homo sapiens retinoid X receptor, beta (RXRB), mRNA.	
NM_003489	NRIP1	NP_003480	Homo sapiens nuclear receptor interacting protein 1 (NRIP1), mRNA.	
M29916	RMRP		Human mitochondrial RNA-processing endoribonuclease RNA (mfp) gene; complete cds.	
XM_066446	LOC139051	XP_066446	Homo sapiens similar to pol protein (LOC139051), mRNA.	

Figure 19(4)

Nucleotide Sequence Description			
Gene Symbol	GenBank Accession for mRNA	GenBank Accession for Protein	Nucleotide Sequence Description
NM_007297	BRCA1 FLJ22347 HSA40461	NP_009228 NP_073741 NP_061192	Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-delta2-10, mRNA. Homo sapiens hypothetical protein FLJ22347 (FLJ22347), mRNA. Homo sapiens BVRT protein (HSA404617), mRNA.
XM_058876	MGC49942 T54 LOC126663	XP_058876 NP_056513 XP_060102	Homo sapiens hypothetical protein MGC49942 (MGC49942), mRNA. Homo sapiens T54 protein (T54), mRNA. Homo sapiens LOC1266635 (LOC1266635), mRNA.
NM_013316	CNOT4 AB033019 XM_067598	NP_037448 BAE86507 XP_067598	Homo sapiens CCR4-NOT transcription complex, subunit 4 (CNOT4), mRNA. Homo sapiens mRNA for KIAA1193 protein, partial cds. Homo sapiens similar to POLYADENYLATE-BINDING PROTEIN 2 (POLY(A) BINDING PROTEIN 2) (PABP 2) (LOC131898), mRNA.
NM_000937	POLR2A LOC152282	NP_000928 XP_087530	Homo sapiens polymerase (RNA) II (DNA directed) Polypeptide A, 220kDa (POLR2A), mRNA. Homo sapiens similar to hypothetical protein FLJ20273 (LOC152827), mRNA.
V_047272	LOC92781	XP_047272	Homo sapiens similar to dj309K20.4 (KIAA0765, putative brain nucleolar targeted protein (HRHF2091, RNA recognition motif (RRNP, RRM or RBD domain) containing protein)) (LOC92781), mRNA. (LOC160258), mRNA. Homo sapiens similar to nuclear matrix protein NMP200 related to splicing factor PRP19 (H. sapiens) (LOC160258), mRNA.
V_080177	LOC16025	XP_090177	Homo sapiens mRNA for TRABID protein (TRABID gene). Homo sapiens trinucleotide repeat containing 4 (TNRC4), mRNA.
J252060	TRABID TNRC4 p53R2	CAB64449 NP_009116 BAE92493	Homo sapiens trinucleotide repeat containing 4 (TNRC4), mRNA. Homo sapiens p53R2 gene for ribonuclease reductase, exon 9 and complete cds.
V_007185	THRAP3 RNASE3L	NP_005110 NP_037367	Homo sapiens thyroid hormone receptor associated protein 3 (THRAP3), mRNA. Homo sapiens nuclear RNase III Drosha (RNASE3L), mRNA.
V_005119	SNRPD3 LOC13926	NP_004166 XP_066586	Homo sapiens small nuclear ribonucleoprotein D3 polypeptide 18kDa (SNRPD3), mRNA. Homo sapiens similar to Com1 (LOC139264), mRNA.
V_013235		NP_004166	
M_004175		NP_004166	
XM_066586		NP_066586	
NM_018122	FLJ10514 NCOA2 BC004154	NP_060592 NP_006531 AAH04154	Homo sapiens hypothetical protein FLJ10514 (FLJ10514), mRNA. Homo sapiens nuclear receptor coactivator 2 (NCOA2), mRNA. Homo sapiens nuclear receptor subfamily 2, group F, member 1, mRNA (cDNA clone MGC:2388 IMAGE2824138), complete cds.
NM_008567	FARS1	NP_006558	Homo sapiens phenylalanine-tRNA synthetase 1 (mitochondrial) (FARS1), nuclear gene encoding mitochondrial protein, mRNA.
XM_086792	LOC15015 2	XP_086792 AAD13754	Homo sapiens similar to SPLICING FACTOR U2AF 35 KD SUBUNIT (U2 AUXILIARY FACTOR 35 KD SUBUNIT) (U2 SNRNP AUXILIARY FACTOR SMALL SUBUNIT) (LOC150152), mRNA. Homo sapiens exonuclease I (EXO1) mRNA, complete cds.

Figur 2c (1)

Nucleotide Sequence Description					
GenBank Accession for mRNA	Gene Symbol	GenBank Accession for Protein			
XM_064113	LOC12438	XP_064113	Homo sapiens LOC124380 (LOC124380), mRNA.		
	0	RDBP	NP_002895	Homo sapiens RD RNA binding protein (RDBP), mRNA.	
NM_002904	HNRPDL	NP_005454	Homo sapiens heterogeneous nuclear ribonucleoprotein D-like (HNRPDL), transcript variant 1, mRNA.		
NM_005463	TGIF	NP_003235	Homo sapiens TGF-B-induced factor (TALE family homeobox) (TGIF), transcript variant 4, mRNA.		
NM_003244	LOC13778	XP_070603	Homo sapiens similar to ANTIGEN GOR (LOC137784), mRNA.		
XM_070603					
	4	TRERF1	NP_060885	Homo sapiens transcriptional regulating factor 1 (TRERF1), transcript variant 3, mRNA.	
NM_018415	LOC12971	XP_065361	Homo sapiens similar to tudor protein (LOC129715), mRNA.		
XM_065361					
	5	RRP46	NP_064543	Homo sapiens exosome component Rrp46 (RRP46), mRNA.	
NM_020158	CALR	NP_004334	Homo sapiens calreticulin (CALR), mRNA.		
NM_004343	PPIE	NP_006103	Homo sapiens peptidylprolyl isomerase E (cyclophilin E) (PPIE), transcript variant 1, mRNA.		
NM_006112	SF3A1	NP_005888	Homo sapiens splicing factor 3a, subunit 1, 120kDa (SF3A1), mRNA.		
NM_005877	BICD1	NP_001705	Homo sapiens Bicaudal D homolog 1 (Drosophila) (BICD1), mRNA.		
	-001714				
-002467	MYC	NP_002458	Homo sapiens v-myc myelocytomatosis viral oncogene homolog (avian) (MYC), mRNA.		
-014663	JMJD2A	NP_055478	Homo sapiens jumonji domain containing 2A (JMJD2A), mRNA.		
-001436	FBL	NP_001427	Homo sapiens fibrillarin (FBL), mRNA.		
-019038	TDRD4	NP_061911	Homo sapiens tudor domain containing 4 (TDRD4), mRNA.		

Figure 26 (2)

				Nucleotide Sequence Description
GenBank Accession for mRNA	Gene Symbol	GenBank Accession for Protein	GenBank Accession for Protein	
NM_013302 NM_017948 XM_089332	EEF2K NOL8 LOC14938	NP_037434 NP_060418 XP_089332	Homo sapiens elongation factor-2 kinase (EEF2K), mRNA. Homo sapiens nucleolar protein 8 (NOL8), mRNA. Homo sapiens similar to ribosomal protein L22 proprotein; 60S ribosomal protein L22; Epstein-Barr-encoded RNA-associated protein; Epstein-Barr virus small RNA-associated protein; EBER-associated protein; heparin-binding protein 15; heparin-binding protein HBp15... (LOC149382), mRNA.	
AF001947 AF062105 NM_004169 NM_000992 XM_060808	PRP3 IGH SHMT1 RPL29 LOC12807	AAC09069 AAC18141 NP_004160 NP_000983 XP_060808	Homo sapiens U4/U16-associated RNA splicing factor (PRP3) mRNA, complete cds. Homo sapiens clone 21u-19 immunoglobulin heavy chain variable region (IGH) mRNA, partial cds. Homo sapiens serine hydroxymethyltransferase 1 (soluble) (SHMT1), transcript variant 1, mRNA. Homo sapiens ribosomal protein L29 (RPL29), mRNA.	
NM_003902 XM_084392	FUBP1 LOC14296	NP_003893 XP_084392	Homo sapiens similar to VgIIin (High density lipoprotein-binding protein) (HDL-binding protein) (LOC128072), mRNA. Homo sapiens far upstream element (FUSE) binding protein 1 (FUBP1), mRNA. Homo sapiens region containing tudor; Ras homolog enriched in brain 2 (LOC142966), mRNA.	
^F391283 ^_003325 ^_070832	SSA1 HIRA LOC13826	AAK76432 NP_003316 XP_070832	Homo sapiens 11p15.5 clone LOH11A, partial sequence. Homo sapiens HIR histone cell cycle regulation defective homolog A (S. cerevisiae) (HIRA), mRNA. Homo sapiens similar to hypothetical protein (LOC138267), mRNA.	
^_088257	LOC15543	XP_088257	Homo sapiens hypothetical protein LOC155435 (LOC155435), mRNA.	
K021418				Homo sapiens cDNA FLJ11356 fis, clone HEMBA1000150, highly similar to <i>Homosapiens putative RNA helicase</i> mRNA.
J252060 ^_014652 ^_005870 NM_005587	TRABID KIAA0682 SAP18 MEF2A	CAB64449 NP_055667 NP_005861 NP_005578	Homo sapiens mRNA for TRABID protein (TRABID gene). Homo sapiens KIAA0682 gene product (KIAA0682), mRNA. Homo sapiens sin3-associated polypeptide, 18kDa (SAP18), mRNA. Homo sapiens MADS box transcription enhancer factor 2, polypeptide A (myocyte enhancer factor 2A) (MEF2A), mRNA.	
NM_016169 XM_089062	SUFU LOC14886	NP_057253 XP_089062	Homo sapiens suppressor of fused homolog (Drosophila) (SUFU), mRNA. Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HELIX-DESTABILIZING PROTEIN) (SINGLE-STRAND BINDING PROTEIN) (HNRP CORE PROTEIN A1) (LOC148866), mRNA.	
NM_004875 AF129756	POLR1C	NP_004866 AAD18092	Homo sapiens polymerase (RNA) I polypeptide C, 30kDa (POLR1C), transcript variant 2, mRNA. Homo sapiens MSH55 gene, partial cds; and CLIC1, DDAH, G6b, G6c, G6d, G6e, G6f, BAT5, G5b, CSK2B, BAT3, BAT4, G4, Apo M, BAT3, BAT2, AIF-1, 1C7, LST-1, LTB, TNF, and LTA genes, complete cds.	
NM_014872	ZBTB5	NP_055687	Homo sapiens zinc finger and BTB domain containing 5 (ZBTB5), mRNA.	

Figure 21 (1)

Nucleotide Sequence Description

Gene Symbol	GenBank Accession for mRNA	GenBank Accession for Protein	Description
NM_015629	PRPF31	NP_056444	Homo sapiens PRPF31 pre-mRNA processing factor 31 homolog (yeast) (PRPF31), mRNA.
NM_017921	NPL4	NP_060391	Homo sapiens hypothetical protein FLJ20657 (NPL4), mRNA.
NM_002534	OAS1	NP_002525	Homo sapiens 2',5'-oligoadenylate synthetase 1, 40/46kDa (OAS1), transcript variant E16, mRNA.
AF083441	RBMII	AAD52028	Homo sapiens SU11 isoform mRNA, complete cds.
AF028563	MYST4	NP_036462	Homo sapiens MYST histone acetyltransferase (monocytic leukemia) 4 (MYST4), mRNA.
NM_012330	NR2C2	NP_003289	Homo sapiens nuclear receptor subfamily 2, group C, member 2 (NR2C2), mRNA.
NM_003298	LOC1917	XP_061319	Homo sapiens similar to HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HELIX-DESTABILIZING PROTEIN) (SINGLE-STRAND BINDING PROTEIN) (HNRNP CORE PROTEIN A1) (LOC19177), mRNA.
XM_061319			Homo sapiens similar to hypothetical protein DKFZp434I1930 (H. sapiens) (LOC147891), mRNA.
XM_091974	LOC14789	XP_091974	
1	SRP46	NP_115285	Homo sapiens Splicing factor, arginine/serine-rich, 46kD (SRP46), mRNA.
NM_032102	LOC1325	NP_443111	Homo sapiens c-Mpl binding protein (LOC13251), transcript variant 1, mRNA.
NM_052879			
1	TDRD4	NP_061911	Homo sapiens tudor domain containing 4 (TDRD4), mRNA.
1_019038	RPL28	NP_000982	Homo sapiens ribosomal protein L28 (RPL28), mRNA.
1_000991	LGTN	NP_008824	Homo sapiens ligatin (LGTN), mRNA.
1_006893	LOC126633	XP_060102	Homo sapiens LOC126635 (LOC126635), mRNA.
1_060102			
5	RPF1	NP_079341	Homo sapiens RNA processing factor 1 (RPF1), mRNA.
1_025065	PPARBP	NP_004765	Homo sapiens PPAR binding protein (PPARBP), mRNA.
1_004774	FLJ12484	NP_073604	Homo sapiens hypothetical protein FLJ12484 (FLJ12484), mRNA.
1_022767	SF3A2	NP_009096	Homo sapiens splicing factor 3a, subunit 2, 66kDa (SF3A2), mRNA.
1_007165	LOC13322	XP_068248	Homo sapiens similar to heterogeneous ribonuclear particle protein A1.beta - human (LOC133225), mRNA.
1_068248			
5	ANXA2	NP_004030	Homo sapiens annexin A2 (ANXA2), mRNA.
NM_004039			

Figure 21 (2)

Nucleotide Sequence Description

for mRNA	for Protein	NP_007375	TARDBP	NP_031401	Homo sapiens TAR DNA binding protein (TARDBP), mRNA.
NM_000978	RPL23	NP_000969		NP_000969	Homo sapiens ribosomal protein L23 (RPL23), mRNA.
NM_005035	POLRMT	NP_005026		NP_005026	Homo sapiens polymerase (RNA) mitochondrial (DNA directed) (POLRMT), nuclear gene encoding mitochondrial protein, mRNA.
NM_018723	A2BP1	NP_061193		NP_061193	Homo sapiens ataxin 2-binding protein 1 (A2BP1), transcript variant 4, mRNA.
NM_031274	TEX13A	NP_112564		NP_112564	Homo sapiens testis expressed sequence 13A (TEX13A), mRNA.
NM_019037	RRP41	NP_061910		NP_061910	Homo sapiens exosome complex exonuclease RRP41 (RRP41), mRNA.
NM_002938	RNF4	NP_002929		NP_002929	Homo sapiens ring finger protein 4 (RNF4), mRNA.
NM_016024	CGL-79	NP_057108		NP_057108	Homo sapiens CGL-79 protein (CGL-79), mRNA.
NM_000980	RPL18A	NP_000971		NP_000971	Homo sapiens ribosomal protein L18a (RPL18A), mRNA.
NM_005642	TAF7	NP_005633		NP_005633	Homo sapiens TAF7 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 55kDa (TAF7), mRNA.
NM_020967	NCOA5	XP_094555		XP_094555	Homo sapiens similar to RIKEN cDNA C130020J04 (LOC167540), mRNA.
NM_006209	ENPP2	NP_066018		NP_066018	Homo sapiens nuclear receptor coactivator 5 (NCOA5), mRNA.
NM_015934	NOP5/NOP58	NP_006200		NP_006200	Homo sapiens ectonucleotide pyrophosphatase/phosphodiesterase/pyrophosphatase/phosphodiesterase 2 (autotaxin) (ENPP2), mRNA.
NM_003170	SUPT6H	NP_057018		NP_057018	Homo sapiens nucleolar protein NOP5/NOP58 (NOP5/NOP58), mRNA.
NM_005772	RCL1	NP_003161		NP_003161	Homo sapiens suppressor of Ty 6 homolog (S. cerevisiae) (SUPT6H), mRNA.
NM_063346	LOC122888	NP_005763		NP_005763	Homo sapiens RNA terminal phosphate cyclase-like 1 (RCL1), mRNA.
NM_026126	HNRPD	XP_063346		XP_063346	Homo sapiens similar to polyprymidine-tract binding protein (LOC122888), mRNA.
NM_000989	RPL30	AAC23476		AAC23476	Homo sapiens heterogeneous nuclear ribonucleoprotein D (HNRPD) gene, complete cds.
NM_267533		NP_000980		NP_000980	Homo sapiens ribosomal protein L30 (RPL30), mRNA.
NM_004491	GRLF1	AAFT8955		AAFT8955	Homo sapiens CUG-binding protein LYQ-isofrom mRNA, complete cds.
NM_005336	HDLBP	NP_004482		NP_004482	Homo sapiens glucocorticoid receptor DNA binding factor 1 (GRIFF1), transcript variant 2, mRNA.
NM_001970	EIF5A	NP_005327		NP_005327	Homo sapiens high density lipoprotein binding protein (vigin) (HDLBP), mRNA.
NM_062603	LOC121372	NP_001961		NP_001961	Homo sapiens eukaryotic translation initiation factor 5A (EIF5A), mRNA.
NM_001524	LOC151173	XP_062603		XP_062603	Homo sapiens similar to ITBA4 PROTEIN (H. sapiens) (LOC121372), mRNA.
NM_084392	LOC142966	XP_001524		XP_001524	Homo sapiens similar to TAR DNA-binding protein-43 (TDP-43) (LOC151173), mRNA.
NM_014281	SIAHBP1	XP_084392		XP_084392	Homo sapiens region containing tudor; Ras homolog enriched in brain 2 (LOC142966), mRNA.
NM_016505	PS1D	NP_055096		NP_055096	Homo sapiens fuse-binding repressor (SIAHBP1), transcript variant 2, mRNA.
NM_004600	SSA2	NP_057589		NP_057589	Homo sapiens putative S1 RNA binding domain protein (PS1D), mRNA.
NM_003091	SNRBP	NP_004591		NP_004591	Homo sapiens Sjogren syndrome antigen A2 (60kDa, ribonucleoprotein autoantigen SS-A/Ro) (SSA2), mRNA.
NM_008862	TDRKH	NP_003082		NP_003082	Homo sapiens small nuclear ribonucleoprotein polypeptides B and B1 (SNRBP), transcript variant 2, mRNA.
NM_015156	RCOR	NP_006853		NP_006853	Homo sapiens tudor and KH domain containing (TDRKH), mRNA.
NM_053971		NP_053971		NP_053971	Homo sapiens REST corepressor (RCOR), mRNA.

Gene Symbol

GenBank
Accession
for mRNA

Nucleotide Sequence Description

Gene Symbol	GenBank Accession for mRNA	GenBank Accession for Protein	Nucleotide Sequence Description
NM_018387	STRBP	NP_060857	Homo sapiens spermatid perinuclear RNA binding protein (STRBP), mRNA.
NM_003787	NOL4	NP_003778	Homo sapiens nucleolar protein 4 (NOL4), mRNA.
NM_001356	DDX3X	NP_001347	Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 3, X-linked (DDX3X), transcript variant 2, mRNA.
NM_012330	MYST4	NP_036462	Homo sapiens MYST histone acetyltransferase (monocytic leukemia) 4 (MYST4), mRNA.
NM_007367	RALY	NP_031393	Homo sapiens RNA binding protein (autoantigenic, hnRNP-associated with lethal yellow) (RALY), transcript variant 2, mRNA.
NM_005548	KARS	NP_005539	Homo sapiens lysyl-tRNA synthetase (KARS), mRNA.
NM_001436	FBL	NP_001427	Homo sapiens fibrillarin (FBL), mRNA.
NM_012279	JAZ	NP_036411	Homo sapiens double-stranded RNA-binding zinc finger protein JAZ (JAZ), mRNA.
NM_002296	LBR	NP_002287	Homo sapiens lamin B receptor (LBR), transcript variant 1, mRNA.
NM_001071	TYMS	NP_001062	Homo sapiens thymidylate synthetase (TYMS), mRNA.
XM_062601	LOC121365	XP_062601	Homo sapiens similar to RBM1 (LOC121365), mRNA.
NM_000982	RPL21	NP_000973	Homo sapiens ribosomal protein L21 (RPL21), mRNA.
0588819	MSI2	XP_058819	Homo sapiens ribosomal protein L19 (MSI2), mRNA.
-084625	LOC143763	XP_084625	Homo sapiens similar to coactivator activator (LOC143763), mRNA.
-000971	RPL7	NP_000962	Homo sapiens ribosomal protein L7 (RPL7), mRNA.
-049523	HYP4	AAC27501	Homo sapiens huntingtin-interacting protein HYP4/FBP11 (HYP4) mRNA, partial cds.
-000990	RPL27A	NP_000981	Homo sapiens ribosomal protein L27a (RPL27A), mRNA.
-001031	RPS28	NP_001022	Homo sapiens ribosomal protein S28 (RPS28), mRNA.
-001021	RPS17	NP_001012	Homo sapiens ribosomal protein S17 (RPS17), mRNA.
-017993	FLJ10094	NP_060463	Homo sapiens hypothetical protein FLJ10094 (FLJ10094), mRNA.
-003651	CSDA	NP_003642	Homo sapiens cold shock domain protein A (CSDA), mRNA.
-001714	BICD1	NP_001705	Homo sapiens Bicaudal D homolog 1 (Drosophila) (BICD1), mRNA.
_033360	KRAS2	NP_203524	Homo sapiens v-Ki-ras2 Kirsten rat sarcoma 2 viral oncogene homolog (KRAS2), transcript variant a, mRNA.
L13848	DDX9	AAB48855	Human RNA helicase A mRNA, complete cds.
BC004154	NR2F1	AAH04154	Homo sapiens nuclear receptor subfamily 2, group F, member 1, mRNA (cDNA clone MGC:2388 IMAGE:2824138), complete cds.
NM_016304	C15orf15	NP_057388	Homo sapiens chromosome 15 open reading frame 15 (C15orf15), mRNA.
NM_022551	RPS18	NP_072045	Homo sapiens ribosomal protein S18 (RPS18), mRNA.
NM_003244	TGIF	NP_003235	Homo sapiens TGFβ-induced factor (TALE family homeobox) (TGIF), transcript variant 4, mRNA.
NM_003095	SNRPF	NP_003086	Homo sapiens small nuclear ribonucleoprotein polypeptide F (SNRPF), mRNA.
NM_003017	SFRS3	NP_003008	Homo sapiens splicing factor, arginine/serine-rich 3 (SFRS3), mRNA.
NM_033246	PML	NP_150249	Homo sapiens promyelocytic leukemia (PML), transcript variant 7, mRNA.
NM_003754	EIF3S5	NP_003745	Homo sapiens eukaryotic translation initiation factor 3, subunit 5 epsilon, 47kDa (EIF3S5), mRNA.

F1 quest 22 (2)

Nucleotide Sequence Description					
Gene Symbol	GenBank Accession for mRNA	GenBank Accession for Protein			
XM_012968	LOC151921	XP_012968	Homo sapiens similar to chromosome 20 open reading frame 14; putative mitochondrial outer membrane protein import receptor; similar to yeast pre-mRNA splicing factors, Ptp1/Zer and Ptp6 (LOC151921), mRNA.		
NM_004593	SFRS10	NP_004584	Homo sapiens splicing factor, arginine/serine-rich 10 (transformer 2 homolog, Drosophila) (SFRS10), mRNA.		
NM_017489	TERF1	NP_059523	Homo sapiens telomeric repeat binding factor (NIMA-interacting) 1 (TERF1), transcript variant 1, mRNA.		
NM_020143	LOC56902	NP_064528	Homo sapiens putative 28 kDa protein (LOC56902), mRNA.		
XM_067072	LOC140098	XP_067072	Homo sapiens similar to RBM1 (LOC140098), mRNA.		
XM_059656	LOC133522	XP_059656	Homo sapiens similar to PGC-1 related co-activator (LOC133522), mRNA.		
X99302	pop1	CAA67684	H.sapiens mRNA for Pop1 protein.		
AL080063	DKFZp564I05	CAB45694	Homo sapiens mRNA; cDNA DKFZp564I052 (from clone DKFZp564I052).		
NM_006112	PIPIE	NP_006103	Homo sapiens peptidylprolyl isomerase E (cyclophilin E) (PIPIE), transcript variant 1, mRNA.		
_005826	HNRRPR	NP_005817	Homo sapiens heterogeneous nuclear ribonucleoprotein R (HNRRPR), mRNA.		
_003819	PABPC4	NP_003810	Homo sapiens poly(A) binding protein, cytoplasmic 4 (inducible form) (PABPC4), mRNA.		
_003690	PRKRA	NP_003681	Homo sapiens protein kinase, interferon-inducible double stranded RNA dependent activator (PRKRA), mRNA.		
_001488	TADA2L	NP_001479	Homo sapiens transcriptional adaptor 2 (ADA2 homolog, yeast)-like (TADA2L), transcript variant 1, mRNA.		
_058653	LOC122651	XP_058653	Homo sapiens LOC122651 (LOC122651), mRNA.		
_004953	EIF4G1	NP_004944	Homo sapiens eukaryotic translation initiation factor 4 gamma, 1 (EIF4G1), transcript variant 5, mRNA.		
_088868	LOC163412	XP_088868	Homo sapiens LOC163412 (LOC163412), mRNA.		
_021038	MBNL1	NP_066368	Homo sapiens muscleblind-like (Drosophila) (MBNL1), mRNA.		
_017736	FLJ20274	NP_060206	Homo sapiens hypothetical protein FLJ20274 (FLJ20274), mRNA.		
NM_006451	PAIP1	NP_006442	Homo sapiens poly(A) binding protein interacting protein 1 (PAIP1), transcript variant 1, mRNA.		
NM_004501	HNRPDU	NP_004492	Homo sapiens heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A) (HNRPDU), transcript variant 2, mRNA.		
NM_001412	EIF1A	NP_001403	Homo sapiens eukaryotic translation initiation factor 1A (EIF1A), mRNA.		
AB014564	KIAA0664	BAA31639	Homo sapiens mRNA for KIAA0664 protein, partial cds.		
D80007	KIAA0185	BAA11502	Homo sapiens KIAA0185 mRNA, complete cds.		
NM_004184	WARS	NP_004175	Homo sapiens tryptophanyl-tRNA synthetase (WARS), mRNA.		
NM_019038	TDRD4	NP_061911	Homo sapiens tudor domain containing 4 (TDRD4), mRNA.		
NM_030621	DICER1	NP_085124	Homo sapiens Dicer1, Dcr-1 homolog (Drosophila) (DICER1), transcript variant 2, mRNA.		
AF167570		AAD51099	Homo sapiens nuclear factor associated with dsRNA NFAR-2 mRNA, complete cds.		
NM_005872	BCAS2	NP_005863	Homo sapiens breast carcinoma amplified sequence 2 (BCAS2), mRNA.		

Figure 22 (3)

Nucleotide Sequence Description			
Gene Symbol	GenBank Accession for mRNA	GenBank Accession for Protein	Description
D82351	BAA11561		Human retropseudogene MSSP-1. DNA, complete cds.
NM_004990	MARS	NP_004981	Homo sapiens methionine-tRNA synthetase (MARS), mRNA.
NM_006842	SF3B2	NP_006833	Homo sapiens splicing factor 3b, subunit 2, 145kD (SF3B2), mRNA
NM_017840	MRPL16	NP_060310	Homo sapiens mitochondrial ribosomal protein L16 (MRPL16), nuclear gene encoding mitochondrial protein, mRNA

Figure 22(4)

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
AB00280	PHT1	BAA20489	Rattus norvegicus mRNA for peptide/histidine transporter, complete cds.
AB011679		BAA32736	Rattus norvegicus mRNA for class I beta-tubulin, complete cds.
AB017265		BAA82585	Rattus norvegicus gene for glycosyphosphatidylinositol anchor attachment 1 (GPAA1), partial cds.
AB018253	cnr5	BAA76556	Rattus norvegicus mRNA for voltage-gated ca channel, complete cds.
AB045586		BAB61764	Rattus norvegicus cnr5 mRNA for cadherin-related neuronal receptor 5, partial cds.
AB047324	TAT1	BAB55595	Rattus norvegicus TAT1 mRNA, complete cds.
AB053997		BAB62175	Rattus norvegicus mRNA for QKI, partial cds.
AF003187		AAB60895	Rattus norvegicus cocaine attenuated zinc-finger protein mRNA, partial cds.
AF022089		AAB82556	Rattus norvegicus guanine nucleotide binding protein gamma 4 subunit mRNA, partial cds.
AF022091		AAB82558	Rattus norvegicus guanine nucleotide binding protein gamma 12 subunit mRNA, partial cds.
AF02604	P2X2	AAC72286	Rattus norvegicus P2X2 purinoreceptor isoform f (P2X2) mRNA, partial cds.
AF035952	Kip3a	AAB88700	Rattus norvegicus kinesin-related protein 3A (Kip3a) mRNA, partial cds.
AF050159	IRS-2	AAC05512	Rattus norvegicus insulin receptor substrate 2 (IRS-2) mRNA, partial cds.
AF061443	LGR4	AAC77910	Rattus norvegicus G protein-coupled receptor LGR4 (LGR4) mRNA, complete cds.
AF079162	ptc	AAC99398	Rattus norvegicus patched (ptc) mRNA, partial cds.
AF083418	IRS-2	AAC33346	Rattus norvegicus insulin receptor substrate-2 (IRS-2) mRNA, partial cds.
AF087674		AAC36726	Rattus norvegicus insulin receptor substrate 2 (IRS-2) mRNA, partial cds.
AF102262		AAD1721	Rattus norvegicus N-acetylglucosamine galactosyltransferase (beta1-4GT) mRNA, partial cds.
AF109644	CAR1	AAF01255	Rattus norvegicus coxsackievirus-receptor homolog (CAR1) mRNA, partial cds.
AF130341	MT1	AAG18471	Rattus norvegicus melatonin receptor (MT1) mRNA, partial cds.
AF136231		AAD33684	Rattus norvegicus caspase-2 mRNA, complete cds.
AF148323	APPILS	AAF73106	Rattus norvegicus aminopeptidase PILS (APPILS) mRNA, complete cds.
AF159049		AAF80364	Rattus norvegicus angiotensin II type 1A receptor associated protein mRNA, complete cds.
AF180469	TM6P1	AAF01324	Rattus norvegicus TM6P1 (TM6P1) mRNA, complete cds.
AF183261	Theta	AAF70382	Rattus norvegicus GABA-A receptor theta subunit (Theta) mRNA, partial cds.

Figure 23

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence ID	Description
AF195045	Ugg1	AAF28720	Rattus norvegicus TRC8 gene, partial cds.
AF20359		AAF67072	Rattus norvegicus UDP-glucose glycoprotein glucosyltransferase precursor (Ugg1) mRNA, complete cds.
AF228043		AAF76422	Rattus norvegicus nuclear hormone receptor co-regulator/co-activator mRNA, partial cds.
AF239219	Pg12	AAK15063	Rattus norvegicus prostaglandin transporter subtype 2 (Pg12) mRNA, complete cds.
AF244920		AAF44715	Rattus norvegicus potassium channel regulatory factor mRNA, complete cds.
AF260582		AAK49395	Rattus norvegicus hippyragranin mRNA, complete cds.
AF268030		AAF72346	Rattus norvegicus copper transporter 1 mRNA, complete cds.
AF273024		AAF81786	Rattus norvegicus amino acid system A transporter mRNA, complete cds.
AF352172		AAK32708	Rattus norvegicus v-raf murine sarcoma viral oncogene B1-like protein mRNA, partial cds.
AF361239		AAK67316	Rattus norvegicus lysosomal amino acid transporter 1 mRNA, complete cds.
AF385409	Eif5a2	AAL40650	Rattus norvegicus eukaryotic translation initiation factor 5A isoform II (Eif5a2) gene, exons 2 and 3 and partial cds.
AF385833		AAK66567	Rattus norvegicus RAC1 mRNA, partial cds.
AF406844		AAK96221	Rattus norvegicus clone PLRR-4 polymorphic leucine-rich repeat protein mRNA, complete cds.
AF439397	Sip30	AAL35221	Rattus norvegicus SNAP25 interacting protein 30 (Sip30) mRNA, complete cds.
AF441118	Bnip3l	AAL32462	Rattus norvegicus BNIP3L protein (Bnip3l) mRNA, complete cds.
AF442357		AAI35353	Rattus norvegicus reticulin 3 protein isoform a mRNA, complete cds; alternatively spliced.
AJ131111	LANCL1	CAB63943	Rattus sp. mRNA lanthionine synthetase C-like protein 1 (LANCL1 gene).
AJ224156		CAA11853	Rattus norvegicus mRNA for ceramide glucosyltransferase.
AJ243395	scn3b	CAB76638	Rattus norvegicus mRNA for voltage-gated sodium channel beta-3 subunit.
AY012054	Zfx	AAG38797	Rattus norvegicus zinc finger protein ZFX (Zfx) gene, partial cds.
D14418	PP2A ARA	BAA21803	Rattus norvegicus PP2A ARA mRNA for A regulatory subunit of protein phosphatase 2A, partial cds.
D16479	RTP-beta	BAA03940	Rat mRNA for mitochondrial long-chain 3-ketoacyl-CoA thiolase beta-subunit of mitochondrial trifunctional protein, complete cds.
D17521	CIC-3	BAA04471	Rattus rattus CIC-3 mRNA for protein kinase C-regulated chloride channel, complete cds.

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	GeneBank Accession Number or Manufacturer Sequence Reference	Description
D25233		BAA04958	Rattus norvegicus mRNA for retinoblastoma protein, partial sequence.
J02934		AAA41856	Rat cAMP-dependent protein kinase type II regulatory subunit mRNA, 3' end.
J04983	VIN1	AAA41104	Rat ecto-ATPase mRNA, complete cds.
L09732	AcIRII	AAA41010	Rat cyclin D2 (VIN1) mRNA, complete cds.
L10599		AAA40674	Rat adrin type II receptor (AcIRII) mRNA, 5' end of cds.
L12382	GATA-GT2	AAA40687	Rattus norvegicus ADP-ribosylation factor 3 mRNA, complete cds.
L22761		AAA16159	Rat DNA binding protein (GATA-GT2) mRNA, complete cds.
M18331		AAA41872	Rat protein kinase C epsilon subspecies.
M18769		AAA41196	Rat liver beta-galactosidase alpha 2,6-sialyltransferase mRNA, complete cds.
M19042		AAA41626	Rat proviral Moloney murine leukemia mutant t594-2 DNA, partial cds.
M24353		AAA66457	Rattus norvegicus alpha-mannosidase II mRNA, partial cds.
M32973		AAA41639	Rat mitochondrial solute carrier protein mRNA, 5' end.
M34083		AAA79273	Rat lactogen receptor mRNA, complete cds.
M35965	tkB	AAA42089	Rat thyroglobulin (Tg-2) mRNA, complete cds.
M55292		AAA42280	Rat neural receptor protein-tyrosine kinase (ItkB) mRNA, complete cds.
NM_012506	Alp1a3	NP_036638	Rattus norvegicus ATPase, Na+K+ transporting, alpha 3 polypeptide (Alp1a3), mRNA.
NM_012551	Egr1	NP_036683	Rattus norvegicus early growth response 1 (Egr1), mRNA.
NM_012563	Gad2	NP_036695	Rattus norvegicus glutamate decarboxylase 2 (Gad2), mRNA.
NM_012569	Gls	NP_036701	Rattus norvegicus glutaminase (Gls), mRNA.
NM_012609	Nf1	NP_036741	Rattus norvegicus neurofibromatosis 1 (Nf1), mRNA.
NM_012637	Pipn1	NP_036769	Rattus norvegicus protein tyrosine phosphatase, non-receptor type 1 (Pipn1), mRNA.
NM_012649	Sdc4	NP_036781	Rattus norvegicus syndecan 4 (Sdc4), mRNA.
NM_012655	Sp1	NP_036787	Rattus norvegicus Sp1 transcription factor (Sp1), mRNA.
NM_012663	Vamp2	NP_036795	Rattus norvegicus vesicle-associated membrane protein 2 (Vamp2), mRNA.
NM_012713	Ptkb1	NP_036845	Rattus norvegicus protein kinase C, beta 1 (Ptkb1), mRNA.

Nucleotide GenBank Accession Number or Manufacturer	Gene Name or Manufacturer	Probe Name	GeneBank Accession Number or Manufacturer	Sequence	Description
Sequence ID	Reference				
NM_012794	Glycam1	NP_036926	Rattus norvegicus glycosylation dependent cell adhesion molecule 1 (Glycam1), mRNA.		
NM_012799	Nmrbr	NP_036931	Rattus norvegicus neuromedin B receptor (Nmrbr), mRNA.		
NM_012806	Mapt10	NP_036938	Rattus norvegicus mitogen activated protein kinase 10 (Mapk10), mRNA.		
NM_012836	Cpd	NP_036968	Rattus norvegicus carboxypeptidase D (Cpd), mRNA.		
NM_012863	Mist1	NP_036995	Rattus norvegicus muscle, intestine and stomach expression 1 (Mist1), mRNA.		
NM_012879	Slc2a2	NP_037011	Rattus norvegicus solute carrier family 2, member 2 (Slc2a2), mRNA.		
NM_012919	Cacna2d1	NP_037051	Rattus norvegicus calcium channel, voltage-dependent, alpha2/delta subunit 1 (CACNA2D1), mRNA.		
NM_012948	Emd	NP_037080	Rattus norvegicus emerin (Emd), mRNA.		
NM_012998	P4hb	NP_037130	Rattus norvegicus poly 4-hydroxylase, beta polypeptide (P4hb), mRNA.		
NM_013029	Sialf6c	NP_037161	Rattus norvegicus sialyltransferase 8 C (Sialf6c), mRNA.		
NM_013038	Sxbp1	NP_037170	Rattus norvegicus syntaxin binding protein 1 (Sxbp1), mRNA.		
NM_013080	Ptpz1	NP_037212	Rattus norvegicus protein tyrosine phosphatase, receptor-type, Z polypeptide 1 (Ptpz1), mRNA.		
NM_013087	Ceb1	NP_037219	Rattus norvegicus CD 31 antigen (Ceb1), mRNA.		
NM_013123	Il1r1	NP_037255	Rattus norvegicus interleukin 1 receptor, type I (Il1r1), mRNA.		
NM_013159	Ide	NP_037291	Rattus norvegicus insulin degrading enzyme (Ide), mRNA.		
NM_013181	Ptkar1a	NP_037313	Rattus norvegicus protein kinase, cAMP dependent regulatory, type I, alpha (Ptkar1a), mRNA.		
NM_016999	Cyp4b1	NP_058695	Rattus norvegicus cytochrome P450, subfamily 4B, polypeptide 1 (Cyp4b1), mRNA.		
NM_017065	Gabrb3	NP_058761	Rattus norvegicus gamma-aminobutyric acid receptor, subunit beta 3 (Gabrb3), mRNA.		
NM_017091	Pcsk1	NP_058787	Rattus norvegicus proprotein convertase subtilisin/kexin type 1 (Pcsk1), mRNA.		
NM_017135	Ak4	NP_058831	Rattus norvegicus adenylyl kinase 4 (Ak4), mRNA.		
NM_017197	Cugbp2	NP_058893	Rattus norvegicus CUG triplet repeat, RNA-binding protein 2 (Cugbp2), mRNA.		
NM_017206	Slc6a6	NP_058902	Rattus norvegicus solute carrier family 6, member 6 (Slc6a6), mRNA.		
NM_017231	Pitpn	NP_058927	Rattus norvegicus phosphatidylinositol transfer protein (Pitpn), mRNA.		
NM_017269	Pipj	NP_058965	Rattus norvegicus protein tyrosine phosphatase, receptor type, J (Pipj), mRNA.		
NM_017322	Mapt9	NP_059018	Rattus norvegicus stress activated protein kinase alpha II (Mapt9), mRNA.		

Figure 23

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank GeneBank Accession Number or Manufacturer Sequence ID	Description
Reference	Reference	Reference	Reference
NM_017323	T14	NP_059019	Rattus norvegicus TR4 orphan receptor (T14), mRNA.
NM_017348	CHOT1	NP_059044	Rattus norvegicus choline transporter (CHOT1), mRNA.
NM_019142	Pkaa1	NP_062015	Rattus norvegicus protein kinase, AMP-activated, alpha 1 catalytic subunit (Pkaa1), mRNA.
NM_019166	Syngr1	NP_062039	Rattus norvegicus synaptogyrin 1 (Syngr1), mRNA.
NM_019182	Rnf4	NP_062055	Rattus norvegicus ring finger protein 4 (Rnf4), mRNA.
NM_019192	Sepp1	NP_062085	Rattus norvegicus senoprotein P, plasma, 1 (Sepp1), mRNA.
NM_019195	Cd47	NP_062088	Rattus norvegicus integrin-associated protein (Cd47), mRNA.
NM_019248	Ntrk3	NP_062121	Rattus norvegicus neural receptor protein-tyrosine kinase (Ntrk3), mRNA.
NM_019275	Madh4	NP_062148	Rattus norvegicus MAD homolog 4 (Drosophila) (Madh4), mRNA.
NM_019354	Ucp2	NP_062227	Rattus norvegicus uncoupling protein 2 (Ucp2), mRNA.
NM_019367	Ppi2	NP_062240	Rattus norvegicus palmitoylprotein thioesterase 2 (Ppi2), mRNA.
NM_019377	Ywhab	NP_062250	Rattus norvegicus tyrosine 3-monooxygenase/tryptophan 5 monooxygenase activation protein, beta polypeptide (Ywhab), mRNA.
NM_021594	LOC59114	NP_067605	Rattus norvegicus ERM-binding phosphoprotein (LOC59114), mRNA.
NM_021597	Gerp95	NP_067608	Rattus norvegicus GERP95 (Gerp95), mRNA.
NM_021671	LOC59303	NP_067703	Rattus norvegicus dbe83 (LOC59303), mRNA.
NM_021680	Nxph4	NP_067712	Rattus norvegicus neutrophilin 4 (Nxph4), mRNA.
NM_021682	LOC59318	NP_067714	Rattus norvegicus kilon (LOC59318), mRNA.
NM_021851	Lin7c	NP_068623	Rattus norvegicus lin-7-C (Lin7c), mRNA.
NM_022005	Fxyd6	NP_071288	Rattus norvegicus FXYD domain-containing ion transport regulator 6 (Fxyd6), mRNA.
NM_022208	Gtf2a1	NP_071544	Rattus norvegicus general transcription factor 2a, 1 (Gtf2a1), mRNA.
NM_022223	Fgf14	NP_071559	Rattus norvegicus fibroblast growth factor 14 (Fgf14), mRNA.
NM_022231	Birc4	NP_071567	Rattus norvegicus baculoviral IAP repeat-containing 4 (Birc4), mRNA.
NM_022386	Mafg	NP_071781	Rattus norvegicus v-maf musculoaponeurotic fibrosarcoma (avian) oncogene family, protein G (Mafg), mRNA.

Figure 23

Protein Product GeneBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Accession Number or Manufacturer Sequence Reference	Description
NM_022387	Pafah1b2	NP_071782	Rattus norvegicus platelet-activating factor acetylhydrolase alpha 2 subunit (Pafah1b2), mRNA.
NM_022396	Gng11	NP_071791	Rattus norvegicus guanine nucleotide binding protein gamma subunit 11 (Gng11), mRNA.
NM_022502	Ppt	NP_071947	Rattus norvegicus palmitoyl-protein thioesterase (Ppt), mRNA.
NM_022516	Ptb	NP_071961	Rattus norvegicus polyprymidine tract binding protein (Ptb), mRNA.
NM_022522	Casp2	NP_071967	Rattus norvegicus caspase 2 (Casp2), mRNA.
NM_022548	PAG608	NP_071993	Rattus norvegicus p53-activated gene 608 (PAG608), mRNA.
A_022612	Bcl211	NP_072134	Rattus norvegicus BCL2-like 11 (apoptosis facilitator) (Bcl211), transcript variant 1, mRNA.
A_022619	Slc7a2	NP_072141	Rattus norvegicus solute carrier family 7, member 3 (Slc7a2), mRNA.
A_022673	Mep2	NP_073164	Rattus norvegicus methyl CpG binding protein 2 (MeCP2), mRNA.
A_022799	Nucks	NP_073636	Rattus norvegicus nuclear ubiquitous casein kinase 2 (Nucks), mRNA.
V_022931	Nim3	NP_075220	Rattus norvegicus nim3 protein (Nim3), mRNA.
V_022950	C1galt1	NP_075239	Rattus norvegicus core 1 UDP-galactose:N-acetylgalactosamine-alpha-R beta 1,3-galactosyltransferase (C1galt1) (C1galt1), mRNA.
M_023095	Mgal5	NP_075583	Rattus norvegicus N-acetylglucosaminyltransferase V (Mgal5), mRNA.
M_023956	Gucy1a2	NP_076446	Rattus norvegicus soluble guanylyl cyclase alpha2 subunit (Gucy1a2), mRNA.
M_023977	Gmx33	NP_076467	Rattus norvegicus trans-Golgi protein GMX33 (Gmx33), mRNA.
NM_023991	Ptkaa2	NP_076481	Rattus norvegicus protein kinase, AMP-activated, alpha 2 catalytic subunit (Ptkaa2), mRNA.
NM_024132	Faah	NP_077046	Rattus norvegicus fatty acid amide hydrolase (Faah), mRNA.
NM_024139	Chp	NP_077053	Rattus norvegicus calcium binding protein p22 (Chp), mRNA.
NM_024158	Dck	NP_077072	Rattus norvegicus deoxyctidine kinase (Dck), mRNA.
NM_024368	Frk	NP_077344	Rattus norvegicus src related tyrosine kinase (Frk), mRNA.
NM_024370	Gabrg3	NP_077346	Rattus norvegicus GABA-alpha receptor gamma-3 subunit (Gabrg3), mRNA.
NM_024374	Mtpn	NP_077350	Rattus norvegicus myotrophin (Mtpn), mRNA.
NM_030586	omb5	NP_085075	Rattus norvegicus cytochrome b5, outer mitochondrial membrane isoform (omb5), mRNA.

Figure 23

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GenBank Accession Number or Manufacturer Sequence	Reference	Description
NM_030829	Gprk5	NP_110456	Rattus norvegicus G protein-coupled receptor kinase 5 (Gprk5), mRNA.	
NM_030835	RAMP4	NP_110462	Rattus norvegicus ribosome associated membrane protein 4 (RAMP4), mRNA.	
NM_030849	Bmp1a	NP_110476	Rattus norvegicus bone morphogenetic protein receptor, type 1A (Bmp1a), mRNA.	
NM_030873	Pfn2	NP_110500	Rattus norvegicus profilin II (Pfn2), mRNA.	
NM_030991	Snap25	NP_112253	Rattus norvegicus synaplosomal-associated protein (Snap25), mRNA.	
NM_031011	Amd1	NP_112273	Rattus norvegicus S-adenosylmethionine decarboxylase 1 (Amd1), mRNA.	
NM_031031	Gatm	NP_112293	Rattus norvegicus glycine amidinotransferase (L-arginine:glycine amidinotransferase) (Gatm), mRNA.	
NM_031034	Gna12	NP_112296	Rattus norvegicus guanine nucleotide binding protein, alpha 12 (Gna12), mRNA.	
NM_031036	Gnaq	NP_112298	Rattus norvegicus heterotrimeric guanine nucleotide-binding protein alpha q subunit (Gnaq), mRNA.	
NM_031049	Lss	NP_112311	Rattus norvegicus 2,3-oxidosqualene: lanosterol cyclase (Lss), mRNA.	
NM_031057	Mmsdh	NP_112319	Rattus norvegicus methylmalonate semialdehyde dehydrogenase gene (Mmsdh), mRNA.	
NM_031061	Musk	NP_112323	Rattus norvegicus muscle, skeletal, receptor tyrosine kinase (Musk), mRNA.	
NM_031079	Pde2a	NP_112341	Rattus norvegicus phosphodiesterase 2A, cGMP-stimulated (Pde2a), mRNA.	
NM_031081	Pdk1	NP_112343	Rattus norvegicus 3-phosphoinositide dependent protein kinase-1 (Pdk1), mRNA.	
NM_031120	Ssr3	NP_112382	Rattus norvegicus TRAP-complex gamma subunit (Ssr3), mRNA.	
NM_031123	Sic1	NP_112385	Rattus norvegicus stanniocalcin 1 (Sic1), mRNA.	
NM_031143	Dgtr	NP_112405	Rattus norvegicus diacylglycerol kinase zeta (Dgtr), mRNA.	
NM_031152	Rab11a	NP_112414	Rattus norvegicus RAB11a, member RAS oncogene family (Rab11a), mRNA.	
NM_031344	Fads2	NP_112634	Rattus norvegicus fatty acid desaturase 2 (Fads2), mRNA.	
NM_031346	Rod1	NP_112636	Rattus norvegicus regulator of differentiation (in S. pombe) 1 (Rod1), mRNA.	
NM_031515	Kras2	NP_113703	Rattus norvegicus Kirsten rat sarcoma viral oncogene homologue 2 (active) (Kras2), mRNA.	
NM_031521	Ncam1	NP_113709	Rattus norvegicus neural cell adhesion molecule 1 (Ncam1), mRNA.	
NM_031528	Rara	NP_113716	Rattus norvegicus retinoic acid receptor, alpha (Rara), mRNA.	
NM_031575	Akt3	NP_113753	Rattus norvegicus thymoma viral proto-oncogene 3 (Akt3), mRNA.	
NM_031593	Sy2c	NP_113781	Rattus norvegicus synaptic vesicle protein 2C (Sy2c), mRNA.	

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	GeneBank Accession Number or Manufacturer Sequence	Protein Product Reference	Description
NM_031604	Abp61a	NP_113792	Rattus norvegicus ATPase, H ⁺ transporting, lysosomal noncatalytic accessory protein 1a (Atp6n1a), mRNA.	
NM_031605	Cyp4a12	NP_113793	Rattus norvegicus cytochrome P450, 4a12 (Cyp4a12), mRNA.	
NM_031615	Znf148	NP_113803	Rattus norvegicus zinc finger protein 148 (Znf148), mRNA.	
NM_031726	Scamp5	NP_113914	Rattus norvegicus secretory carrier membrane protein 5 (Scamp5), mRNA.	
NM_031751	Shank1	NP_113939	Rattus norvegicus Shank1 (Shank1), mRNA.	
NM_031755	Ceacam1	NP_113943	Rattus norvegicus carcinoembryonic antigen-related cell adhesion molecule 1 (Ceacam1), mRNA.	
NM_031757	Mmp24	NP_113945	Rattus norvegicus matrix metalloproteinase 24 (membrane-inserted) (Mmp24), mRNA.	
NM_031785	Abp6s1	NP_113973	Rattus norvegicus ATPase, H ⁺ transporting, lysosomal (vacuolar proton pump), subunit 1 (Atp6s1), mRNA.	
NM_031787	Hipk3	NP_113975	Rattus norvegicus homeodomain-interacting protein kinase 3 (Hipk3), mRNA.	
NM_031812	Cd164	NP_114000	Rattus norvegicus CD164 antigen (Cd164), mRNA.	
NM_031818	Clic4	NP_114006	Rattus norvegicus chloride intracellular channel 4 (Clic4), mRNA.	
NM_031828	Kcnma1	NP_114016	Rattus norvegicus potassium large conductance calcium-activated channel, subfamily M, alpha member 1 (Kcnma1), mRNA.	
NM_031841	Scd2	NP_114029	Rattus norvegicus stearoyl-Coenzyme A desaturase 2 (Scd2), mRNA.	
NM_031986	Selbp	NP_114192	Rattus norvegicus synillin (Selcp), mRNA.	
NM_032080	Gsk3b	NP_114469	Rattus norvegicus glycogen synthase kinase 3 beta (Gsk3b), mRNA.	
NM_032084	Chn2	NP_114473	Rattus norvegicus chitinase (Chnaen1) 2 (Chn2), mRNA.	
NM_033376	Kcnk3	NP_203694	Rattus norvegicus potassium channel, subfamily K, member 3 (Kcnk3), mRNA.	
NM_052801	Vhi	NP_434688	Rattus norvegicus von Hippel-Lindau syndrome homolog (Vhi), mRNA.	
NM_053308	Frbp2	NP_445760	Rattus norvegicus FK506 binding protein 2 (Frbp2), mRNA.	
NM_053342	Idax	NP_445794	Rattus norvegicus inhibitor of the Dvl and Axin complex (Idax), mRNA.	
NM_053352	Rdc1	NP_445804	Rattus norvegicus orphan receptor 1 (Rdc1), mRNA.	
NM_053379	Dcx	NP_445831	Rattus norvegicus doublecortin (Dcx), mRNA.	
NM_053407	Asah1	NP_445859	Rattus norvegicus N-acylsphingosine amidohydrolase (acid ceramidase) (Asah1), mRNA.	
NM_053424	Sic4a4	NP_445876	Rattus norvegicus solute carrier family 4, member 4 (Sic4a4), mRNA.	

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
NM_053442	Slc7a8	NP_445894	Rattus norvegicus solute carrier family 7 (cationic amino acid transporter, Y ^r system), member 8 (Slc7a8), mRNA.
NM_053445	Fads1	NP_445897	Rattus norvegicus fatty acid desaturase 1 (Fads1), mRNA.
NM_053465	Fut9	NP_445917	Rattus norvegicus fucosyltransferase 9 (alpha (1,3) fucosyltransferase) (Fut9), mRNA.
NM_053467	Tmp21	NP_445919	Rattus norvegicus integral membrane protein Tmp21-1 (p23) (Tmp21), mRNA.
NM_053472	Cox4b	NP_445924	Rattus norvegicus cytochrome c oxidase, subunit 4b (Cox4b), mRNA.
NM_053486	Kif3c	NP_445938	Rattus norvegicus kinesin family member 3C (Kif3c), mRNA.
NM_053494	Slc2a8	NP_445946	Rattus norvegicus solute carrier family 2, (facilitated glucose transporter) member 8 (Slc2a8), mRNA.
NM_053502	Abcg1	NP_445954	Rattus norvegicus ATP-binding cassette, sub-family G (WHITE), member 1 (Abcg1), mRNA.
NM_053565	Cish3	NP_446017	Rattus norvegicus cytokine inducible SH2-containing protein 3 (Cish3), mRNA.
NM_053578	Atp6k	NP_446030	Rattus norvegicus vacuolar proton-ATPase subunit M9.2 (Atp6k), mRNA.
NM_053589	Rab14	NP_446041	Rattus norvegicus GTPase Rab14 (Rab14), mRNA.
NM_053646	Asah2	NP_446098	Rattus norvegicus N-acetylsphingosine amidohydrolase 2 (Asah2), mRNA.
NM_053714	Ank	NP_446166	Rattus norvegicus progressive ankylosis (Ank), mRNA.
NM_053722	Clasp2	NP_446174	Rattus norvegicus CLIP-associating protein 2 (Clasp2), mRNA.
NM_053770	Argbp2	NP_446222	Rattus norvegicus Arg/Abi-interacting protein ArgBP2 (Argbp2), mRNA.
NM_053794	Ptknk1	NP_446246	Rattus norvegicus protein kinase, lysine deficient 1 (Ptknk1), mRNA.
NM_053798	Sacm1l	NP_446250	Rattus norvegicus SAC1 (suppressor of actin mutations 1, homolog)-like (S. cerevisiae) (Sacm1l), mRNA.
NM_053863	Slc28a1	NP_446315	Rattus norvegicus solute carrier family 28 (sodium-coupled nucleoside transporter), member 1 (Slc28a1), mRNA.
NM_053886	Lman1	NP_446338	Rattus norvegicus lectin, mannose-binding, 1 (Lman1), mRNA.
NM_053891	Cdk5r	NP_446343	Rattus norvegicus cyclin-dependent kinase 5, regulatory subunit 1 (p35) (Cdk5r), mRNA.
NM_053952	Nup155	NP_446404	Rattus norvegicus nucleoporin 155kD (Nup155), mRNA.
NM_054000	Kcnb2	NP_446452	Rattus norvegicus potassium voltage gated channel, Shab-related subfamily, member 2 (Kcnb2), mRNA.
NM_057098	Tcea2	NP_476439	Rattus norvegicus transcription elongation factor A2 (Tcea2), mRNA.

Figure 23

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Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
NM_057132	Ath2	NP_476473	Rattus norvegicus p19sia ras-related homolog A2 (Ath2), mRNA.
NM_057148	2-Sep	NP_476489	Rattus norvegicus septin 2 (Sep2), mRNA.
NM_057186	HadhsC	NP_476534	Rattus norvegicus L-3-hydroxyacyl-Coenzyme A dehydrogenase, short chain (HadhsC), mRNA.
NM_057210	Sv2a	NP_476558	Rattus norvegicus synaptic vesicle glycoprotein 2 a (Sv2a), mRNA.
NM_080577	Np4	NP_542144	Rattus norvegicus homolog of yeast nuclear protein localization 4 (Npl4), mRNA.
S61973		AAB20211	Rattus sp. NMDA receptor glutamate-binding subunit mRNA, complete cds.
S73608	AGR9	AAB31153	AGR9-G protein-coupled receptor [rats, aortic vascular smooth muscle cells, mRNA, 1601 nt].
U07795	rap1B	AAA92787	Rattus norvegicus Rap1B mRNA, complete cds.
U15408		AAA81005	Rattus norvegicus plasma membrane Ca2+-ATPase isoform 4 mRNA, complete cds and alternatively spliced variations.
U21116		AAA96350	Rattus norvegicus rbsSec1B mRNA, complete cds.
U31815	ROB2	AAA89157	Rattus norvegicus calcium channel alpha-1C subunit (ROB2), mRNA, partial cds.
U39572		AAD10400	Rattus norvegicus phosphatidylinositol 4-kinase mRNA, complete cds.
U40188		AAC53201	Rattus norvegicus neuronal cell death related gene in neuron -7 (DN-7) mRNA, complete cds.
U41183	GHRH	AAC53041	Rattus norvegicus placental pre-progrowth hormone-releasing hormone (GHRH) mRNA, complete cds.
U41853	ORP150	AAB05672	Rattus norvegicus 150 kDa oxygen regulated protein (ORP150) mRNA, complete cds.
U55927		AAC52813	Rattus norvegicus brain astroglial high-affinity cationic amino acid transporter RCAT2 mRNA, partial cds.
U56261		AAA99825	Rattus norvegicus SNAP-25a mRNA, partial cds.
U61772	NF2	AAC13318	Rattus norvegicus merlin (NF2) mRNA, partial cds.
U67995		AAB39620	Rattus norvegicus stearyl-CoA desaturase 2 mRNA, partial cds.
U76997		AAB19066	Rattus norvegicus insulin-regulated membrane aminopeptidase (RAP) mRNA, complete cds.
U77583	CKIal	AAB19228	Rattus norvegicus casein kinase I alpha L (CKIal) mRNA, complete cds.
U78090		AAC34249	Rattus norvegicus potassium channel regulator 1 mRNA, complete cds.
U78116	AZF5	AAB36798	Rattus norvegicus zinc finger protein 5 (AZF5) mRNA, partial cds.
U90215		AAE49989	Rattus norvegicus polysialyltransferase mRNA, partial cds.

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence	Reference	Description
X05472	ORF 3	CAA29033		Rat 2.4 kb repeat DNA right terminal region.
X53261		CAA37350		R.norvegicus mRNA for protein kinase A catalytic subunit.
X56747		CAA40069		Rat mRNA for fetal intestinal lactase-phlorizin hydrolase precursor, partial.
X60370		CAC16162		R.norvegicus mRNA for microtubule associated protein IB.
X60790	PYBP2	CAA43203		Rat PYBP2 mRNA for pyrimidine binding protein 2.
X64600	tgn41 hem2	CAA45984		R.norvegicus mRNA for the trans Golgi network specific integral membrane protein TGN41.
X80029	TSP-4	CAA56333		R.norvegicus Hem-2 mRNA.
X88963	DAD-1	CAA62002		R.norvegicus TSP-4 protein.
Y13336	Dri 27ZnT4	CAA73780		Rattus norvegicus DAD-1 gene.
Y16774		CAA76372		Rattus norvegicus mRNA for Dri 27ZnT4 protein, complete CDS.
Z18877		CAA79317		R.norvegicus mRNA for 25' oligoadenylyate synthetase.
Z21935		CAA79929		R.norvegicus protein kinase rMNK2.
NM_023986	Temo	NP_076476		Rattus norvegicus TEMO (Temo), mRNA.
RATTUS00016	mwgrat10K46143	u10860		u10860_1 guanosine 5'-monophosphate synthetase - homo sapiens expression: heart strains: sprague_dawley wistar_kyoto gbp
RATTUS00092	mwgrat10K46206	bc014875		bc014875_1 unknown protein for mgc:6920 - mus musculus expression: liver heart brain kidney strains: shrsp sprague_dawley wistar_kyoto gbp
RATTUS00129	mwgrat10K46238	q3Hcc0		non-biotin containing subunit of 3-methylcrotonyl-coa carboxylase ec 6.4.1.4 expression: heart kidney strains: shrsp wistar_kyoto trembl
RATTUS00221	mwgrat10K46320	bc003290		bc003290_1 cyclin i - mus musculus expression: kidney brain heart strains: shrsp sprague_dawley wistar_kyoto gbp
RATTUS00223	mwgrat10K46321	q9p1l0		pro1038 expression: liver heart kidney strains: shrsp sprague_dawley wistar_kyoto trembl
RATTUS00276	mwgrat10K48728	q9zr87		oda-8s protein; kidney expression: brain heart strains: sprague_dawley wistar_kyoto trembl
RATTUS00284	mwgrat10K48373	ak008492		ak008492_1 raten full-length enriched library, clone:201030021 - mus musculus, heart kidney shrsp trembl 075319 p11 ec 3.1.3.4! expression: brain strains: wistar_kyoto gbp

Protein Product			
Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	GenBank Accession Number or Manufacturer Sequence	Description
RATTUS00285	mwgrat10K#5374	af411608	af411608_1 n4wfp56 nedd4 ww domain-binding protein 5a - mus musculus expression: liver heart brain strains: shrsp sprague_dawley wistar_kyoto gbp
RATTUS00379	mwgrat10K#6453	q9gzu0	hypothetical 27.1 kDa protein cdna JI12619 fis, clone nt2/m401682 expression: liver brain heart strains: sprague_dawley wistar_kyoto trembl
RATTUS00410	mwgrat10K#6481	bc006847	bc006847_1 riken cdna 0610013117 gene - mus musculus expression: liver heart strains: shrsp sprague_dawley wistar_kyoto gbp
RATTUS00415	mwgrat10K#6485	q9wvd5	ornithine transporter expression: liver heart kidney strains: shrsp sprague_dawley wistar_kyoto trembl
RATTUS00434	mwgrat10K#6501	q9h3t4	cisplatin resistance related protein crtp expression: brain heart strains: shrsp sprague_dawley wistar_kyoto trembl
RATTUS00437	mwgrat10K#6503	bc014808	bc014808_1 proline rich protein expressed in brain - mus musculus expression: liver heart brain kidney strains: shrsp sprague_dawley wistar_kyoto gbp
RATTUS00451	mwgrat10K#6516	q9han2	pumilio 2; heart wistar_kyoto trembl q9erc7 expression: liver brain strains: shrsp sprague_dawley trembl
RATTUS00521	mwgrat10K#6575	ak003646	ak003646_1 riken full-length enriched library, clone:2310036422 - mus musculus expression: liver heart brain strains: shrsp wistar_kyoto gbp
RATTUS00525	mwgrat10K#6579	ai237619	ai237619_1 dual specificity phosphatase ts-dsp2 - mus musculus expression: heart strains: shrsp wistar_kyoto gbp
RATTUS00526	mwgrat10K#6580	ak009743	ak009743_1 riken full-length enriched library, clone:231004203 - mus musculus expression: heart brain strains: shrsp sprague_dawley wistar_kyoto gbp
RATTUS00530	mwgrat10K#6584	q9n2j7	mitochondrial carrier homolog 1 isoform b expression: brain kidney strains: shrsp trembl
RATTUS00553	mwgrat10K#6606	q9l5t2	cdna: JI12389 fis, clone hep17027 expression: heart brain strains: sprague_dawley wistar_kyoto trembl
RATTUS00575	mwgrat10K#6624	q9j6s5	p53 apoptosis-associated target expression: liver kidney heart strains: shrsp sprague_dawley wistar_kyoto trembl
RATTUS00704	mwgrat10K#6738	bc010856	bc010856_1 unknown protein for mgc:9160 - homo sapiens expression: brain strains: sprague_dawley wistar_kyoto gbp

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	GeneBank Accession Number or Manufacturer Sequence	Reference	Description
RATTUS0794	mwgrat10K#8816	ak007469	ak007469_1 niken full-length enriched library, clone:1810013b01 - mus musculus expression: liver brain kidney strains: shrsp gbp	
RATTUS0848	mwgrat10K#8864	x61585	x61585_1 poly nucleotide adenylyltransferase - bos taurus expression: liver heart kidney strains: shrsp wistar_kyoto gbp	
RATTUS0867	mwgrat10K#8879	o95205	zinc finger protein expression: brain strains: shrsp sprague_dawley trembl	
RATTUS0868	mwgrat10K#8880	bc006778	bc006778_1 unknown protein for image:3589064 - mus musculus expression: brain strains: shrsp sprague_dawley wistar_kyoto g	
ATTUS00870	mwgrat10K#8881	q83380	envelope protein expression: liver brain strains: shrsp sprague_dawley wistar_kyoto trembl	
ATTUS00904	mwgrat10K#8910	q9p1s0	hdckb3p fragment expression: brain strains: shrsp wistar_kyoto trembl	
ATTUS00937	mwgrat10K#8941	q9uf15	kiaa265 protein fragment expression: brain strains: sprague_dawley wistar_kyoto trembl	
ATTUS01071	mwgrat10K#7054	bc003882	bc003882_1 transmembrane 9 superfamily member 2 - mus musculus expression: liver heart kidney brain strains: shrsp sprague_dawley wistar_kyoto gbp	
ATTUS01093	mwgrat10K#7071	q9j6r2	embryonic lung protein expression: liver brain heart strains: shrsp sprague_dawley wistar_kyoto trembl	
ATTUS01148	mwgrat10K#7121	l10426	l10426_1 erf81 ets-related protein - mus musculus expression: brain strains: sprague_dawley wistar_kyoto gbp	
ATTUS01170		ak020910	ak020910_1 niken full-length enriched library, clone:a9300301 - mus musculus expression: brain strains: shrsp sprague_dawley wistar_kyoto gbp	
RATTUS01205	mwgrat10K#7167	ak006207	ak006207_1 niken full-length enriched library, clone:170002106 - mus musculus expression: liver heart brain strains: shrsp sprague_dawley wistar_kyoto gbp	
RATTUS01221	mwgrat10K#7181	aj278133	aj278133_1 erd2.2 putative kdel receptor - mus musculus expression: liver kidney brain strains: shrsp sprague_dawley wistar_kyoto g	
RATTUS01273	mwgrat10K#7225	caa03190	sequence 2 from patent w09610636 expression: liver brain strains: sprague_dawley wistar_kyoto trembl	
RATTUS01287	mwgrat10K#7238	ak011418	ak011418_1 niken full-length enriched library, clone:2610016f14 - mus musculus expression: brain strains: shrsp wistar_kyoto gbp	
RATTUS01294	mwgrat10K#7245	q9nvf7	cdna flij10651 fis, clone n2tp2005868 expression: brain strains: shrsp sprague_dawley wistar_kyoto trembl	

Protein Product			
Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Accession Number or Manufacturer Sequence Reference	Description
RATTUS01392	mwgrat10K#7330	ak009373	ak009373_1 raten full-length enriched library, clone:2310015o17 - mus musculus expression: liver brain strains: sprague_dawley wistar_kyoto gbp m59288_1 ferrocetidase - mus musculus expression: liver brain strains: shrsp wistar_kyoto gbp m59288_1 ferrocetidase - mus musculus expression: liver brain strains: shrsp wistar_kyoto gbp
RATTUS01404	mwgrat10K#7342	m59288	af212935_1 cat4b catlin cat4b - homo sapiens expression: liver strains: wistar_kyoto gbp
RATTUS01416	mwgrat10K#7352	af212935	ak005698_1 raten full-length enriched library, clone:1700007d05 - mus musculus expression: liver heart strains: sprague_dawley wistar_kyoto gbp
RATTUS01422	mwgrat10K#7358	ak005698	sequence 13 from patent wo9826065 fragment expression: liver brain strains: shrsp sprague_dawley wistar_kyoto trembl
RATTUS01478	mwgrat10K#7409	cab69424	nucleoside diphosphatase er-udpase expression: liver kidney strains: wistar_kyoto trembl bc012401_1 unknown protein for mgc:11724 - mus musculus expression: liver brain strains: shrsp sprague_dawley wistar_kyoto gbp
RATTUS01526	mwgrat10K#7452	q9wuz9	cdna flj12756 fis, clone n12rp2001295, weakly zinc/cadmium resistance protein expression: liver brain strains: sprague_dawley wistar_kyoto trembl
RATTUS01538	mwgrat10K#7464	bc012401	bc003454_1 raten cdna 11002fn07 gene - mus musculus expression: kidney heart strains: sprague_dawley wistar_kyoto gbp
RATTUS01590	mwgrat10K#7512	q9t9h1	alpha-associated factor expression: heart kidney brain strains: shrsp sprague_dawley wistar_kyoto trembl bc006941_1 sphingosine kinase 2 - mus musculus expression: kidney strains: shrsp wistar_kyoto gbp
RATTUS01595	mwgrat10K#7517	bc003454	ak008666_1 raten full-length enriched library, clone:2210008a03 - mus musculus expression: kidney strains: shrsp wistar_kyoto gbp ba39402_1 cpi-15 protein expression: brain heart kidney strains: shrsp sprague_dawley wistar_kyoto trembl cdna: flj22937 fis, clone ka07960 expression: liver brain kidney strains: shrsp sprague_dawley wistar_kyoto trembl
RATTUS01656	mwgrat10K#7570	q9lk31	fragment expression: kidney brain strains: shrsp wistar_kyoto trembl ax118871_1 homo sapiens sequence 35 from patent wo0129221 unnamed protein product expression: kidney strains: shrsp wistar_kyoto gbp
RATTUS01659	mwgrat10K#7583	bc006941	
RATTUS01679	mwgrat10K#7592	ak008666	
RATTUS01713	mwgrat10K#7622	q9nq07	
RATTUS01762	mwgrat10K#7667	q9h5w6	
RATTUS01834	mwgrat10K#8559	q9lmf6	
RATTUS01846	mwgrat10K#7749	ax118871	

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
RATTUS01882	mwgrat10K#7785	bcd03936	bc003936_1 unknown protein for nrgc:7327 - mus musculus expression: brain strains: shrsp sprague_dawley gbp
RATTUS02017	mwgrat10K#7912	q9qxm0	alpha/beta hydrolase-2 fold protein expression: liver strains: shrsp sprague_dawley trembl
RATTUS02037	mwgrat10K#7932	bcd11313	bc0111313_1 unknown protein for nrgc:19443 - mus musculus expression: liver brain strains: shrsp sprague_dawley gbp
RATTUS02056	mwgrat10K#7949	q9hc79	serine kinase expression: liver brain strains: shrsp trembl
RATTUS02104	mwgrat10K#7991	aJ277386	aj277386_1 p14 late endosomal/lysosomal mp1 interacting protein - mus musculus expression: brain heart strains: shrsp sprague_dawley gbp
RATTUS02120	mwgrat10K#8006	af077188	af077188_1 cul4a culin 4a - homo sapiens expression: liver brain kidney strains: shrsp sprague_dawley gbp
RATTUS02168	mwgrat10K#8052	ak011126	ak011126_1 riken full-length enriched library, clone:2600001b17 - mus musculus expression: brain heart strains: shrsp sprague_dawley gbp
RATTUS02183	mwgrat10K#8067	000495	26s proteasome subunit 9 expression: heart brain strains: shrsp sprague_dawley gbp
RATTUS02235	mwgrat10K#8116	x53247	x53247_1 member of ras gene family en-7 protein - mus musculus expression: kidney brain strains: sprague_dawley wistar_kyoto gbp
RATTUS02251	mwgrat10K#8130	cac24865	sequence 3 from patent wo0100831 expression: liver heart brain kidney strains: shrsp sprague_dawley wistar_kyoto tremb
RATTUS02282	mwgrat10K#8152	af104398	af104398_1 comtchon - homo sapiens expression: liver brain heart strains: shrsp sprague_dawley wistar_kyoto gbp
RATTUS02294	mwgrat10K#8162	ak014369	ak014369_1 riken full-length enriched library, clone:3300002d08 - mus musculus expression: brain heart strains: sprague_dawley wistar_kyoto gbp
RATTUS02298	mwgrat10K#8166	ak015239	ak015239_1 riken full-length enriched library, clone:4930429h24 - mus musculus expression: heart brain strains: shrsp sprague_dawley wistar_kyoto gbp
RATTUS02333	mwgrat10K#8195	q9uggg6	39k3 protein expression: heart brain strains: sprague_dawley wistar_kyoto trembl
RATTUS02339	mwgrat10K#8200	q9jkw0	arf-6 interacting protein-1 expression: liver kidney brain strains: shrsp sprague_dawley wistar_kyoto trembl
RATTUS02445	mwgrat10K#8294		expression: liver brain strains: shrsp sprague_dawley wistar_kyoto mwg own new gene sequence

Figure 23

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accesssion Number or Manufacturer Sequence Reference	Description
RATTUS02490	mwgrat10K#8335	q9h871	expression: kidney brain strains: shrsp wistar_kyoto mwg own new gene sequence cdna fji13910 fis, clone y79aa1000131; trembl q9lfw5 cdna: fji21795 hep00531 expression: liver strains: shrsp trembl
RATTUS02564	mwgrat10K#8395		
RATTUS02579	mwgrat10K#8408	q9hbm3 bc003862	dipeptidyl peptidase 8 fragment expression: liver strains: shrsp trembl bc003862_1 transmembrane 9 superfamily member 2 - mus musculus expression: liver heart kidney brain strains: shrsp sprague_dawley wistar_kyoto gbp
RATTUS02653	mwgrat10K#8468		
RATTUS02662	mwgrat10K#8476	q14667	kiaa0100 protein expression: liver kidney heart brain strains: shrsp sprague_dawley wistar_kyoto trembl
RATTUS02688	mwgrat10K#8499	q9nsl9	hypothetical 22.2 kda protein fragment expression: brain strains: wistar_kyoto trembl
RATTUS02717	mwgrat10K#8524	af295358	al295358_1 unknown - mus musculus expression: brain strains: wistar_kyoto gbp
RATTUS02731	mwgrat10K#8550	ak017729	ak017729_1 riken full-length enriched library, clone:573049dn06 - mus musculus: wistar_kyoto trembl cac25005 sequence 49 from patent wo20100806 precursor expression: brain strains: shrsp gbp
RATTUS02792	mwgrat10K#8583	u59321	u59321_1 p72 dead-box protein p72 - homo sapiens expression: heart strains: wistar_kyoto gbp
RATTUS02814	mwgrat10K#8598	u58135	u58135_1 poly A polymerase v - mus musculus: heart trembl q9r1f3 testis-specific expression: liver kidney strains: shrsp wistar_kyoto gbp
RATTUS02918	mwgrat10K#8683	q92544	myeloblast kiaa0255 expression: liver strains: wistar_kyoto trembl
RATTUS02943	mwgrat10K#8699	q9hj23	npd016 expression: liver strains: wistar_kyoto trembl
RATTUS02971	mwgrat10K#8723	bc002137	bc002137_1 q9j3018 gene product - mus musculus expression: liver strains: wistar_kyoto gbp
RATTUS03203	mwgrat10K#8914	q9fc24	transcription factor fib; trembl p70212 hypothetical 22.7 kda protein expression: liver brain strains: sprague_dawley wistar_kyoto trembl
RATTUS03223	mwgrat10K#8928	q9jil0	lmb1 long form expression: brain strains: sprague_dawley trembl
RATTUS03260	mwgrat10K#9233	q9j449	tra4-associated factor 2 fragment; shrsp expression: brain strains: sprague_dawley trembl
RATTUS03288	mwgrat10K#8981	o15194	ya22 protein hya22; kidney wistar_kyoto expression: brain strains: sprague_dawley trembl
RATTUS03326	mwgrat10K#9012	bc007154	bc007154_1 unknown protein for image:3485091 - mus musculus expression: brain strains: sprague_dawley gbp

Figure 23

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Description
RATTUS3387	mwgrat10K#9060	ak003050	ak003050_1 riken full-length enriched library, clone:0710000m05 - mus musculus expression: heart strains: sprague_dawley gbp u62325_1 hfe651 fe65-like protein - homo sapiens expression: heart strains: sprague_dawley gbp
RATTUS3472	mwgrat10K#9126	u62325 q9n150	hypothetical 28.7 kDa protein fragment expression: liver strains: sprague_dawley trembl
RATTUS3489	mwgrat10K#9139	q9waz9	nucleoside diphosphatase ex-endopeptidase expression: liver strains: sprague_dawley trembl
RATTUS3495	mwgrat10K#9144	075071	kiaa0494 protein expression: liver strains: sprague_dawley trembl
RATTUS3510	mwgrat10K#9158	ai356440	al356440_1 dj239f11.1 dj239f11.1 d.melanogaster protein cg14464 - homo sapiens expression: liver strains: sprague_dawley gbp
RATTUS3523	mwgrat10K#9169		
RATTUS3577	mwgrat10K#9213	035963	rab33b expression: brain strains: shrsp trembl
RATTUS3642	mwgrat10K#9265	cac09285	sequence 1 from patent wo9814562 fragment expression: brain strains: shrsp trembl
RATTUS3669	mwgrat10K#9288	bc009494	bc009494_1 unknown protein for mgc:16403 - homo sapiens expression: brain strains: shrsp gbp
RATTUS3700	mwgrat10K#9318	q9ngq3	ba11d8_1 yeast ubiquitin conjugating enzyme ubc6 homolog fragment expression: brain strains: shrsp trembl
RATTUS3772	mwgrat10K#932	u95498	u95498_1 af1q - mus musculus expression: brain strains: shrsp sprague_dawley wistar_kyoto gbp
RATTUS3793	mwgrat10K#9398	075061	kiaa0473 protein expression: brain strains: shrsp trembl
RATTUS3819	mwgrat10K#9421	075061	kiaa0473 protein expression: brain strains: shrsp trembl
RATTUS3860	mwgrat10K#9455	q9j4c4	masl1 protein expression: heart strains: shrsp trembl
RATTUS3893	mwgrat10K#9483	q9jj5	c11orf17 protein expression: heart strains: shrsp trembl
RATTUS3951	mwgrat10K#9525	000495	26s proteasome subunit 9 expression: heart strains: shrsp trembl
RATTUS3971	mwgrat10K#9537	x61585	x61585_1 polynucleotide adenyllyltransferase - bos taurus expression: liver heart kidney strains: shrsp wistar_kyoto gbp
RATTUS04030	mwgrat10K#9583	bc002867	bc002867_1 unknown protein for mgc:3940519 - homo sapiens expression: kidney strains: shrsp gbp
RATTUS04036	mwgrat10K#9589	bc013036	bc013036_1 unknown protein for mgc:4734 - homo sapiens expression: kidney strains: shrsp gbp
RATTUS04052	mwgrat10K#9603	q9h4p0	clone catabp0035 sequence expression: kidney strains: shrsp trembl
RATTUS04155	mwgrat10K#9696		expression: heart strains: sprague_dawley mwg own new gene sequence

Figure 23

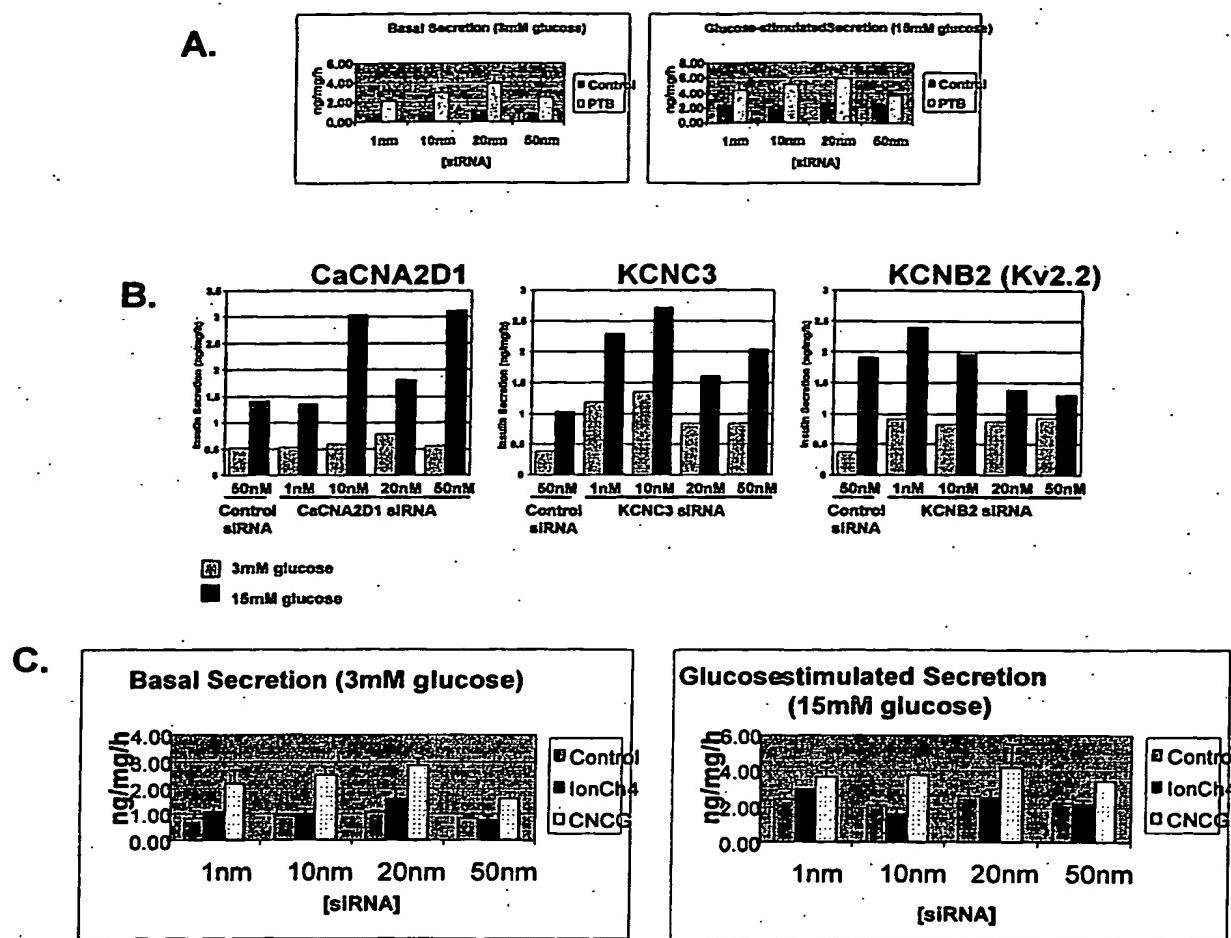


Figure 24

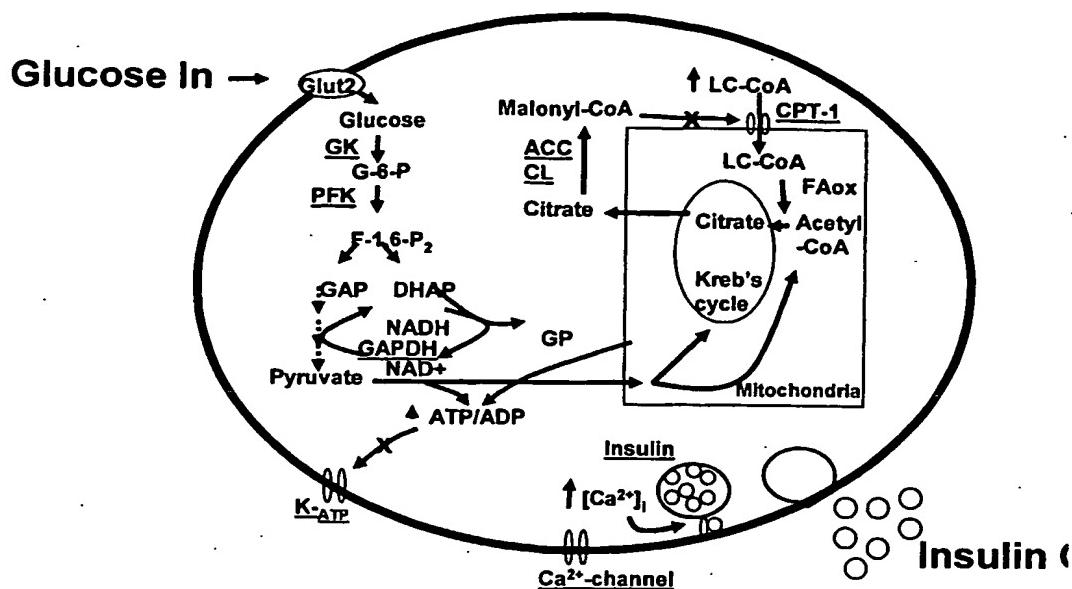


Figure 25

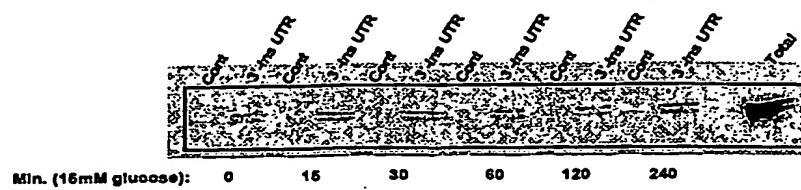


Fig 26A

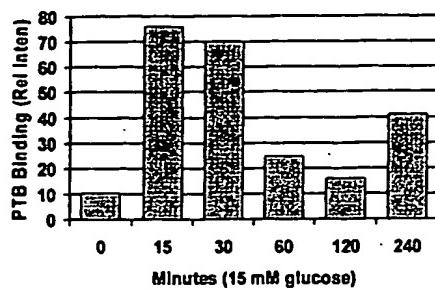


Fig 5B

Protein Product			
Nucleotide GenBank Accession Number or Manufacturer	Gene Name or Manufacturer Probe Name	GeneBank Accession Number or Manufacturer Sequence Reference	Kinases
Sequence ID			
NM_031081	Pdpk1	NP_112343	Rattus norvegicus 3-phosphoinositide dependent protein kinase-1 (Pdpk1), mRNA.
NM_022799	Nucks	NP_073636	Rattus norvegicus nuclear ubiquitous casein kinase 2 (Nucks), mRNA.
NM_019248	Ntrk3	NP_062121	Rattus norvegicus neural receptor protein-tyrosine kinase (Ntrk3), mRNA.
NM_053585	Madd	NP_446037	Rattus norvegicus MAP-kinase activating death domain (Madd), mRNA.
NM_022627	Prkab2	NP_072149	Rattus norvegicus AMP-activated protein kinase beta-2 regulatory subunit (Prkab2), mRNA.
NM_012727	Camk4	NP_036859	Rattus norvegicus calcium/calmodulin-dependent protein kinase IV (Camk4), mRNA.
NM_012713	Ptkcb1	NP_036845	Rattus norvegicus protein kinase C, beta 1 (Ptkcb1), mRNA.
NM_013218	Ak3	NP_037350	Rattus norvegicus adenylyl kinase 3 (Ak3), mRNA.
NM_017246	Map2k5	NP_058942	Rattus norvegicus mitogen activated protein kinase kinase 5 (Map2k5), mRNA.
AB040531	RH2K	BAA96496	Rattus norvegicus mRNA for RH2K2, complete cds.
U39572		AAD10400	Rattus norvegicus phosphatidylinositol 4-kinase mRNA, complete cds.
NM_012565	Gck	NP_036697	Rattus norvegicus glucokinase (Gck), mRNA.
NM_032080	Gsk3b	NP_114469	Rattus norvegicus glycogen synthase kinase 3 beta (Gsk3b), mRNA.
NM_080584	Phkg2	NP_542151	Rattus norvegicus phosphorylase kinase, gamma 2 (testis) (Phkg2), mRNA.

Protein Product			
Nucleotide GenBank Accession Number or Manufacturer	Gene Name or Manufacturer Probe Name	GeneBank Accession Number or Manufacturer Sequence Reference	Phosphatases
Sequence ID			
NM_012637	Pipn1	NP_036769	Rattus norvegicus protein tyrosine phosphatase, non-receptor type 1 (Pipn1), mRNA.
NM_019253	Pipn5	NP_062126	Rattus norvegicus protein tyrosine phosphatase, non-receptor type 5 (Pipn5), mRNA.
NM_010544		NP_062126	Rattus norvegicus protein tyrosine phosphatase, non-receptor type 5 (Pipn5), mRNA.

Figure 27

NM_013080	Piprz1	NP_037212	Rattus norvegicus protein tyrosine phosphatase, receptor-type, Z polypeptide 1 (Piprz1), mRNA.
NM_053883	Dusp6	NP_446335	Rattus norvegicus dual specificity phosphatase 6 (Dusp6), mRNA.
NM_057115	Pppn12	NP_476456	Rattus norvegicus protein tyrosine phosphatase, non-receptor type 12 (Pppn12), mRNA.
NM_013098	G6pc	NP_037230	Rattus norvegicus glucose-6-phosphatase, catalytic (G6pc), mRNA.
AB040531	RH2K	BAQ96496	Rattus norvegicus mRNA for RH2K2, complete cds.

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Ion Channels/Regulators of Ion channels
AF013598		AA869328	Rattus norvegicus proton gated cation channel DRASIC mRNA, complete cds.
NM_031548	Scnna1a	NP_113736	Rattus norvegicus sodium channel, nonvoltage-gated, type I, alpha polypeptide (Scnna1a), mRNA.
NM_012919	Cacna2a1	NP_037051	Rattus norvegicus calcium channel, voltage-dependent, alpha2/delta subunit 1 (Cacna2d1), mRNA.
NM_013192	Kcnj6	NP_037324	Rattus norvegicus potassium inwardly-rectifying channel, subfamily J, member 6 (Kcnj6), mRNA.
U78090		AAC34249	Rattus norvegicus potassium channel regulator 1 mRNA, complete cds.
AF280212		AAG35186	Rattus norvegicus calcium channel alpha-1-G subunit mRNA, complete cds.
NM_053497	Cncg	NP_445949	Rattus norvegicus cyclic nucleotide-gated cation channel (Cncg), mRNA.
Y14635		CAA74979	Rattus norvegicus mRNA for proton-gated cation channels modulatory subunit.
AJ003065		CAA05939	Rattus norvegicus mRNA for Kir2.4, inwardly rectifying potassium channel.
NM_031828	Kcnma1	NP_114016	Rattus norvegicus potassium large conductance calcium-activated channel, subfamily M, alpha member 1 (Kcnma1), mRNA.
NM_054000	Kcnb2	NP_446452	Rattus norvegicus potassium voltage gated channel, Shab-related subfamily, member 2 (Kcnb2), mRNA.
NM_021853	Slack	NP_068625	Rattus norvegicus potassium channel subunit (Slack) (Slack), mRNA.
NM_019313	Kcnl1	NP_062186	Rattus norvegicus potassium intermediate/small conductance calcium-activated channel, subfamily N, member 1 (Kcnl1), mRNA.
NM_013125		NP_037257	Rattus norvegicus sodium channel, voltage-gated, type V, alpha polypeptide (Scn5a), mRNA.
AJ309926	Scn5a	CAC44267	Rattus norvegicus mRNA for ion channel (asic 1b gene).
NM_053806	asic 1b	NP_446258	Rattus norvegicus potassium channel, subfamily K, member 6 (TWIK-2) (Kcnk6), mRNA.
	Kcnk6		

Figure 27

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Protein Product GeneBank Accession Number or Manufacturer Sequence ID				Transporters			
Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Accession Number or Manufacturer Sequence Reference	Rattus norvegicus ccc6 mRNA for cation-chloride cotransporter 6, complete cds.	Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Accession Number or Manufacturer Sequence Reference	Rattus norvegicus organic anion transporter E (oatpE) mRNA, complete cds.
AB023645	ccc6	BAB40440	Rattus norvegicus ccc6 mRNA for cation-chloride cotransporter 6, complete cds.	AF273024	oatpE	AAK30042	Rattus norvegicus organic anion transporter E (oatpE) mRNA, complete cds.
AF239262	oatpE	AAK30042	Rattus norvegicus organic anion transporter E (oatpE) mRNA, complete cds.	AB000280	PHT1	AAF81796	Rattus norvegicus amino acid system A transporter mRNA, complete cds.
AB000280	PHT1	BAA20489	Rattus norvegicus amino acid system A transporter mRNA, complete cds.	NM_017348	CHOT1	NP_059044	Rattus norvegicus mRNA for peptide/histidine transporter, complete cds.
NM_017348	CHOT1	NP_059044	Rattus norvegicus choline transporter (CHOT1), mRNA.	AF268030		AAF72546	Rattus norvegicus copper transporter 1 mRNA, complete cds.
AF268030		AAF72546	Rattus norvegicus copper transporter 1 mRNA, complete cds.	NM_022866	Slc13a3	NP_074057	Rattus norvegicus solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 3 (Slc13a3), mRNA
NM_022866	Slc13a3	NP_074057	Rattus norvegicus solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 3 (Slc13a3), mRNA	AJ315643	Hmit	CAC51117	Rattus norvegicus mRNA for proton myo-inositol symporter (Hmit gene).
AJ315643	Hmit	CAC51117	Rattus norvegicus mRNA for proton myo-inositol symporter (Hmit gene).	U55816	KCC2	AAC52635	Rattus norvegicus furanamide-sensitive K-Cl cotransporter (KCC2) mRNA, complete cds.
U55816	KCC2	AAC52635	Rattus norvegicus furanamide-sensitive K-Cl cotransporter (KCC2) mRNA, complete cds.	NM_013034	Slc6aa4	NP_037166	Rattus norvegicus solute carrier family 6, member 4 (Slc6aa4), mRNA.
NM_013034	Slc6aa4	NP_037166	Rattus norvegicus solute carrier family 6, member 4 (Slc6aa4), mRNA.	NM_012879	Slc2a2	NP_037011	Rattus norvegicus solute carrier family 2, member 2 (Slc2a2), mRNA.
Protein Product GeneBank Accession Number or Manufacturer Sequence ID				Proteases/Peptidases			
Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Accession Number or Manufacturer Sequence Reference	Rattus norvegicus carboxypeptidase D (Cpd), mRNA.	Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Accession Number or Manufacturer Sequence Reference	Rattus norvegicus carboxypeptidase D (Cpd), mRNA.
NM_012836	Cpd	NP_036968	Rattus norvegicus carboxypeptidase D (Cpd), mRNA.	AF202454		AAF17575	Rattus norvegicus testis ubiquitin specific processing protease mRNA, complete cds.
AF202454		AAF17575	Rattus norvegicus testis ubiquitin specific processing protease mRNA, complete cds.	NM_017145	Mcp11	NP_058841	Rattus norvegicus mast cell protease 1 (Mcp11), mRNA.
NM_017145	Mcp11	NP_058841	Rattus norvegicus mast cell protease 1 (Mcp11), mRNA.				

Figure 27

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	GeneBank Accession Number or Manufacturer Sequence	Reference	Receptors
NM_019246	Pck7	NP_0622119	Rattus norvegicus proprotein convertase subtilisin / kexin, type 7 (Pck7), mRNA.	
NM_017138	Lamr1	NP_058834	Rattus norvegicus laminin receptor 1 (67KD, ribosomal protein SA) (Lamr1), mRNA.	
NM_012637	Ptpn1	NP_036769	Rattus norvegicus protein tyrosine phosphatase, non-receptor type 1 (Ptpn1), mRNA.	
NM_016996	Casr	NP_058692	Rattus norvegicus calcium-sensing receptor (Casr), mRNA.	
NM_019248	Ntrk3	NP_0622121	Rattus norvegicus neural receptor protein-tyrosine kinase (Ntrk3), mRNA.	
U47331		AAA88798	Rattus norvegicus metabotropic glutamate receptor 4b mRNA, complete cds.	
NM_019328	Nr4a2	NP_0622201	Rattus norvegicus nuclear receptor subfamily 4, group A, member 2 (Nr4a2), mRNA.	
NM_012869	Npy5r	NP_037001	Rattus norvegicus neuropeptide Y receptor 5 (Npy5r), mRNA.	
NM_019253	Ptpn5	NP_062126	Rattus norvegicus protein tyrosine phosphatase, non-receptor type 5 (Ptpn5), mRNA.	
NM_052807	Igf1r	NP_434694	Rattus norvegicus insulin-like growth factor 1 receptor (Igf1r), mRNA.	
NM_013080	Ptpz1	NP_037212	Rattus norvegicus protein tyrosine phosphatase, receptor-type, Z polypeptide 1 (Ptpz1), mRNA.	
NM_031628	Nr4a3	NP_113816	Rattus norvegicus nuclear receptor subfamily 4, group A, member 3 (Nr4a3), transcript variant 1, mRNA.	
NM_017011	Gm1	NP_058707	Rattus norvegicus glutamate receptor, metabotropic 1 (Gm1), mRNA.	
NM_013091	Tnfrsf1a	NP_037223	Rattus norvegicus tumor necrosis factor receptor superfamily, member 1a (Tnfrsf1a), mRNA.	
NM_017071	Insr	NP_058767	Rattus norvegicus insulin receptor (Insr), mRNA.	
AF161588	Gabarap	AAD47643	Rattus norvegicus GABA-A receptor-associated protein (Gabarap) mRNA, complete cds.	
NM_057115	Ptpn12	NP_476456	Rattus norvegicus protein tyrosine phosphatase, non-receptor type 12 (Ptpn12), mRNA.	
NM_012528	Chmb1	NP_0366660	Rattus norvegicus cholinergic receptor, nicotinic, beta polypeptide 1 (Chmb1), mRNA.	
AF010293	U131	AAB66433	Rattus norvegicus olfactory receptor (U131) mRNA, complete cds.	
NM_012957	Gabb2	NP_037089	Rattus norvegicus gamma-aminobutyric acid receptor, subunit beta 2 (Gabb2), mRNA.	
NM_012959	Gfra1	NP_037091	Rattus norvegicus glial cell line derived neurotrophic factor family receptor alpha 1 (Gfra1), mRNA.	
NM_053296	Glib	NP_445748	Rattus norvegicus glycine receptor, beta subunit (Glib), mRNA.	
AF205193		AAF19028	Rattus norvegicus glutamate receptor interacting protein 2 mRNA, complete cds.	
Z23272		CAA80810	Rattus norvegicus PACAP receptor, hip-hop 1 splice variant, complete CDS.	
AF230645		AAF36975	Rattus norvegicus testis-type galactosidase receptor mRNA, complete cds.	

Figure 27

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NM_012896	Adora3	NP_037028	Rattus norvegicus adenosine A3 receptor (Adora3), mRNA.
NM_024146	Fgrf1	NP_077060	Rattus norvegicus Fibroblast growth factor receptor 1 (Fgrf1), mRNA.
NM_022186	Nrb2	NP_071522	Rattus norvegicus nuclear receptor binding factor 2 (Nrb2), mRNA.
U22630		AAA91303	Rattus norvegicus P2Y purinoreceptor mRNA, complete cds.
NM_021745	Nr1h4	NP_068513	Rattus norvegicus nuclear receptor subfamily 1, group H, member 4 (Nr1h4), mRNA.
NM_013124	Pparg	NP_037256	Rattus norvegicus peroxisome proliferator activated receptor, gamma (Pparg), mRNA.
AJ011370	5-HT4	CAA09599	Rattus norvegicus mRNA for serotonin 4 receptor, splice variant r5-HT4(e).
AF016387	RXRgamma	AAD01591	Rattus norvegicus retinoid X receptor gamma (RXRgamma) mRNA, partial cds.
NM_022212	Insr	NP_071548	Rattus norvegicus insulin receptor-related receptor (Insr), mRNA.

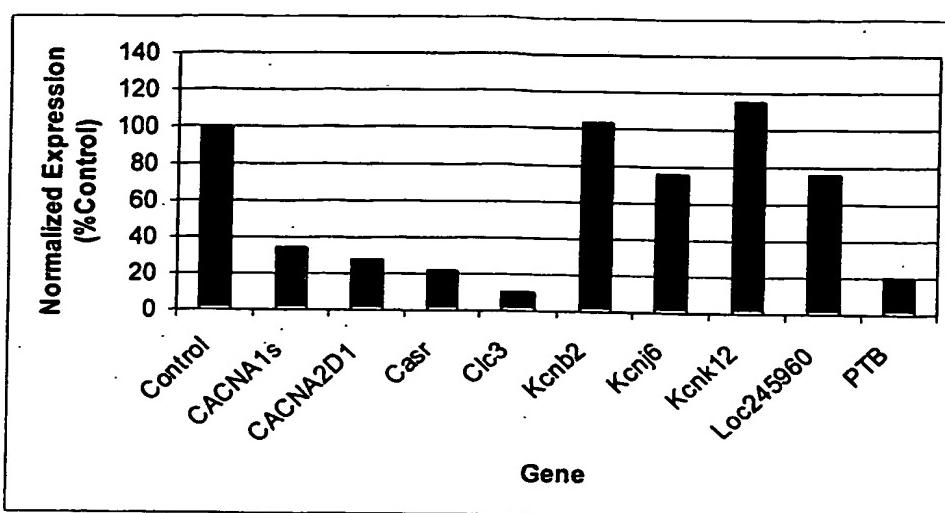
Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Gene Name or Manufacturer Probe Name	Protein Product		
		GeneBank Accession Number or Manufacturer Sequence Reference	Transferases	Transferases
NM_022635	Cml4	NP_072157	Rattus norvegicus putative N-acetyltransferase Camello 4 (Cml4), mRNA.	
NM_022280	Lrat	NP_071616	Rattus norvegicus lecithin-retinol acyltransferase (Lrat), mRNA.	
X14211		CAA32428	Rat mRNA for phenylethanolamine-N-methyltransferase (PNMT).	
NM_031635	Fut2	NP_113823	Rattus norvegicus fucosyltransferase 2 (Fut2), mRNA.	
NM_013029	Slat8c	NP_037161	Rattus norvegicus sialyltransferase 8 C (Slat8c), mRNA.	
NM_031980	Ug12b12	NP_114186	Rattus norvegicus UDP-glucuronosyltransferase (Ug12b12), mRNA.	
NM_022219	Fut4	NP_071555	Rattus norvegicus alpha 1,3-fucosyltransferase Fuc-T (similar to mouse Fut4) (Fut4), mRNA.	
NM_053437	Dgat1	NP_445889	Rattus norvegicus diacylglycerol O-acyltransferase 1 (Dgat1), mRNA.	

Figure 27

Nucleotide GenBank Accession Number or Manufacturer Sequence ID	Protein Product GeneBank Accession Number or Manufacturer Sequence Reference	Transcription Factors
Gene Name or Manufacturer Probe Name		
NM_012747	Stat3 NP_038879	Rattus norvegicus signal transducer and activator of transcription 3 (Stat3), mRNA.
NM_017339	Isl1 NP_059035	Rattus norvegicus ISL1 transcription factor, LIM/homeodomain 1 (Isl1), mRNA.
NM_021770	Olig1 NP_068538	Rattus norvegicus oligodendrocyte transcription factor 1 (Olig1), mRNA.

Figure 27

A.



B.

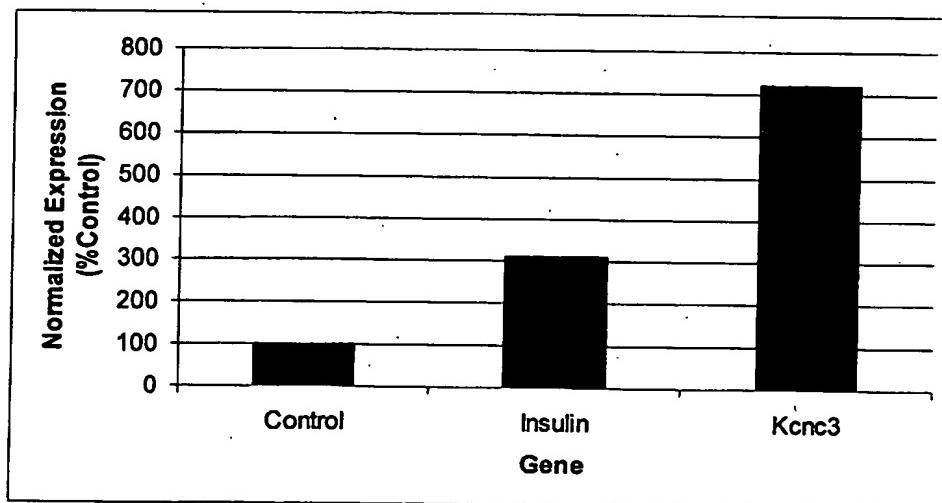


Figure 28